



# Vendor Landscape: Digital Signage Software

Supercharge the omnichannel experience through digital signage to combine channels, increase sales, and increase overall customer satisfaction.

# Introduction

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**In this digital age, a dedicated commitment to the omnichannel will achieve superior customer experiences that will pay dividends through increased traffic, customized guest targeting, and improved overall loyalty.**

## **This Research Is Designed For:**

- ✓ CIOs, VPs, and audio visual technicians who have been tasked with transitioning from static to dynamic digital signs while identifying ways to improve the experience of their guests, increase advertisement revenue, integrate automated service functions, or display content in an enticing or interactive way.
- ✓ CMOs, VP hotel operations/general managers, and organizations with a digital signage use case that may include:
  - Expanding and incorporating digital signage into the brand's omnichannel experience and path to purchase.
  - Leveraging IoT and big data technologies to identify guests and deliver content directly to their phones or surrounding players.

## **This Research Will Help You:**

- ✓ Understand what trends are surfacing in the gaming and hospitality digital signage market.
- ✓ Evaluate digital signage vendors and products and their alignment to your enterprise needs.
- ✓ Determine which products are most appropriate for particular features, use cases, and scenarios.

# Executive summary

Info-Tech evaluated 13 competitors in the digital signage market, including the following notable performers:

## Champions:

- **Four Winds Interactive**, a significant market player, delivers extensive system integrations and an intuitive UI that enables operators to dramatically optimize and innovate the customer's digital experience.
- **Nanonation**, an organization truly committed to customer reliability, has partnered with strong hardware providers to ease deployment challenges and reduce deployment timeframes.
- **22 Miles**, a relatively new player in the digital signage market, has been making significant headway by focusing on creating integrated end-user experiences and providing innovative wayfinding features and video walls.
- **BroadSign** offers operators a best-in-class, secure cloud solution that delivers on both table stakes and innovative features of digital signage solutions.

## Trend Setter Award:

- **Four Winds Interactive** provides a single platform that delivers on all of the functional components of a comprehensive digital signage solution. Four Wind's innovative apps-store approach offers operators numerous pre-made apps that deliver templates, signs, feeds, etc. to simplify the content creation and management phases.

## Info-Tech Insight



- 1. Long-Term, Cohesive Content Strategies**  
The convergence of digital signage, kiosks, mobile, in-room tablets, and back-end digital content management systems is inevitable. Build an omnichannel strategy that integrates all of these systems to avoid redundancy, improve data collection, and provide a better experience to your patrons.
- 2. Integrate With IoT and Big Data:**  
Beacons, sensors, and actuators make it possible for digital signage systems to interact with other systems beyond the screen. Use IoT and big data to analyze customer data and create a more customized and targeted experience.
- 3. Marketing Fundamentals Still Apply:**  
With the technologies that exist currently, can a 40" screen that displays the same playlist 24/7 be considered a digital signage solution? Displaying the right information at the right time, in the right place, and in the right context is still critically important. Your solution must be information dense while still being entertaining and memorable.

# Market overview

## *How it got here*

- “Digital signs,” also known as digital out-of-home (DOOH) advertisements or digital media networks, belong to a segment of the signage industry that capitalizes on technologies such as LCD, LED, and projectors to display digital marketing images, videos, maps, and other dynamic and interactive content.
- Digital signage evolved concurrently with the internet in the early 90s as static duratrans signs and TV commercial effectiveness had stagnated. Through the use of video, players, and commercial displays via the internet, the idea of digital signage was born.
- Initially very expensive, displays such as LCD and projectors dropped significantly in price during the early 2000s, making them much more accessible for all organizations.
- Once established, retailers, restaurants, casinos, and hotels began exploring options to provide guest services and advertisements in much more interactive ways, starting with meeting room wallboards to public space end-caps to ambiance-creating lobby columns.

## *Where it's going*

- It has been demonstrated that a standard retail digital sign generates 2-5 times more customer impressions than a static sign and as a result the desire for digital out-of-home signs has increased rapidly across all industries, including both gaming and hospitality.
- As digital signage technologies continue to advance, operators have the opportunity to provide increasingly customized and targeted messaging as well as interactive experiences to their customers. By combining online (business analytics and intelligence) and mobile capabilities (NFC, iBeacons, QR codes, etc.) operators can uniquely target their patrons with relevant ad messages to create memorable customer experiences.
- An omnichannel strategy is the culmination of synchronized back-end systems that provide a consistent experience to the customer at each touchpoint. As the technology evolves, many vendors will adopt this strategy to combine channels, increase sales, and increase overall customer satisfaction at critical moments during the path to purchase.



As digital signage platforms and players have significantly improved in functionality, reliability, and cost effectiveness, operators can expect to see significant ROIs soon after deployment.

# Digital signage software vendor selection / knock-out criteria: market share, mind share, and platform coverage

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- Effective digital signage is key to tying together an organization's omnichannel strategy and providing a consistent experience to the customer across touchpoints. Furthermore, incorporating IoT technologies and big data into the digital signage platform will ensure the right message, at the right place, at the right time.
- For this Vendor Landscape, Info-Tech focused on those vendors that offer broad capabilities across multiple platforms and that have a strong market presence and/or reputational presence among all sizes of gaming and hospitality organizations.

## Included in this Vendor Landscape:

- **22 Miles**, a relatively new digital signage provider, places priority on creating an integrated end-user experience. 22 Miles is expanding its global operations and has solidified its place in the market through continuous growth.
- **Appspace** entered the digital communication market in 2002, focusing primarily on internal workforce communication. Appspace has now expanded beyond internal communications to retail, education, etc. content management and digital signage.
- **Barco X2O**. X2O Media was acquired by the visualization giant Barco in 2014. Founded in 1934, Barco has a global reach with clients in a variety of industries including venues, hospitality, healthcare, and education. X2O Media continues to place significant emphasis on research and development, constantly enhancing its feature set.
- **BroadSign**, a cloud-based provider of digital signage solutions to customers in over 40 countries, was purchased by JedFam Group in 2012. Its platform powers over 120,000 displays in venues such as airports, cinemas, shopping malls, and offices.
- **Carmanah Signs** was acquired by Stratacache in November 2013. Carmanah Signs is an established market provider of digital signage in the lottery and gaming sector with over 100,000 jackpot signs deployed in over 500 casinos globally.
- **CastNET**, a division of Alpha Video and Audio, has been specializing in digital signage content creation and management since the early 90s. CastNET is deployed at casino properties around the world including Holland, Malaysia, Italy, and the US.

# Digital signage software vendor selection / knock-out criteria: market share, mind share, and platform coverage (continued)

For this Vendor Landscape, Info-Tech focused on those vendors that offer broad capabilities across multiple platforms and that have a strong market presence and/or reputational presence among all sizes of gaming and hospitality organizations.

## Included in this Vendor Landscape:

- **DISE**, a Swedish organization founded in 2004, has amassed a strong presence in over 30 countries and more than 10,000 licenses throughout the world. DISE focuses on scalable digital signage solutions in the transport, finance, retail, government, and sport industries.
- **Four Winds Interactive (FWI)** is a significant player in visual communications (more than 500,000 signs deployed globally) to build, deploy, and manage visual applications across enterprise digital signs, interactive kiosks, desktop, web, and mobile.
- **JANUS Displays**. Morrow Technologies, a long-standing vendor in the visual communications space launched JANUS Displays in 1987. It services digital signage needs of hospitals, hotels, universities, and casinos.
- **Nanonation** is an established provider of digital communication and visualization solutions. Nanonation services primarily the retail, hospitality, entertainment, and financial services sector and has deployed over 40,000 displays globally.
- **Paltronics**, a strong player in the Asian and Australian gaming industry since 1999 but able to provide products worldwide including North America, focuses primarily on slot-bonusing tech, progressive slot meters, and table-game signs.
- **Scala**. As a pioneer in the industry with more than 500,000 signs throughout 100 countries, Scala has over 25 years of digital signage experience across wide-ranging industries like retail, finance, education, healthcare, and gaming.
- **Scientific Games** acquired Bally Technologies in 2014 and is a global provider of slots, video machines, casino management systems, and networked solutions for the lottery and gaming industry. Bally acquired Planar Systems Inc.'s CoolSign digital signage business in 2008.

# Digital signage software criteria and weighting factors

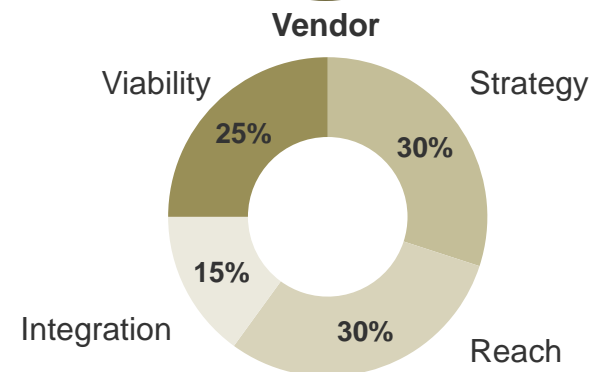
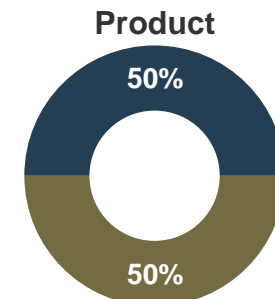
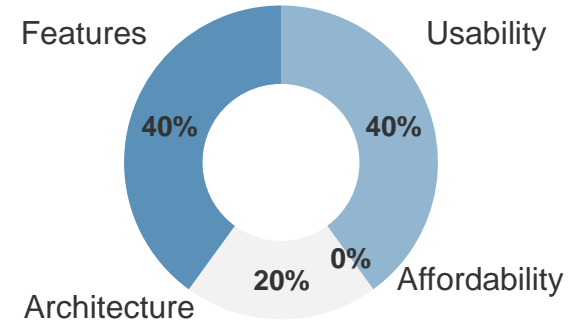
## Product Evaluation Criteria

Features	The solution provides basic and advanced feature/functionality.
Usability	The end-user and administrative interfaces are intuitive and offer streamlined workflow.
Affordability	Implementing and operating the solution is affordable given the technology.
Architecture	Multiple deployment options and extensive integration capabilities are available.

## Vendor Evaluation Criteria

Viability	Vendor is profitable, knowledgeable, and will be around for the long term.
Strategy	Vendor is committed to the space and has a future product and portfolio roadmap.
Reach	Vendor offers global coverage and is able to sell and provide post-sales support.
Integration	Vendor integration capabilities are appropriate for the gaming & hospitality industry.

## Criteria Weighting



# The Info-Tech Digital Signage Software Vendor Landscape

## The zones of the Landscape

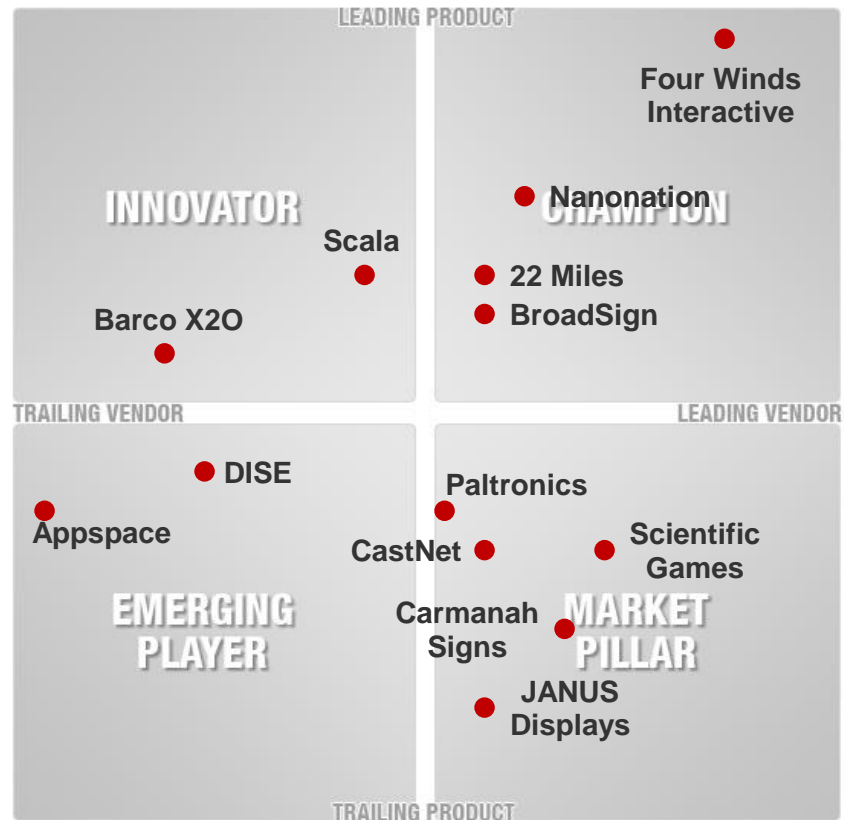
**Champions** receive high scores for most evaluation criteria and offer excellent value. They have a strong market presence and are usually the trend setters for the industry.

**Market Pillars** are established players with very strong vendor credentials, but with more average product scores.

**Innovators** have demonstrated innovative product strengths that act as their competitive advantage in appealing to niche segments of the market.

**Emerging Players** are comparatively newer vendors who are starting to gain a foothold in the marketplace. They balance product and vendor attributes, though score lower relative to market Champions.

## The Info-Tech Digital Signage Software Vendor Landscape



For an explanation of how the Info-Tech Vendor Landscape is created, see [Information Presentation – Vendor Landscape](#) in the Appendix.



# Balance individual strengths to find the best fit for your enterprise

	Product			Vendor					
	Overall	Features	Usability	Arch.	Overall	Viability	Strategy	Reach	Integration
22 Miles									
Appspace									
Barco X20									
BroadSign									
Carmanah Signs									
CastNET									
Legend	=Exemplary	=Good	=Adequate	=Inadequate	=Poor				

For an explanation of how the Info-Tech Harvey Balls are calculated, see [Information Presentation – Criteria Scores \(Harvey Balls\)](#) in the Appendix.

# Balance individual strengths to find the best fit for your enterprise (continued)

	Product				Vendor				
	Overall	Features	Usability	Arch.	Overall	Viability	Strategy	Reach	Integration
DISE									
Four Winds Interactive									
JANUS Displays									
Nanonation									
Paltronics									
Scala									
Scientific Games									

Legend	=Exemplary	=Good	=Adequate	=Inadequate	=Poor
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For an explanation of how the Info-Tech Harvey Balls are calculated, see [Information Presentation – Criteria Scores \(Harvey Balls\)](#) in the Appendix.

# Table Stakes represent the minimum standard; without these, a product doesn't even get reviewed

## The Table Stakes

Feature	What it is:
Reporting, Analytics, and Dashboarding	Provides pre-built and ad hoc reporting tools, reports, and analytics to measure signage key performance indicators (KPIs).
Content Management System	Ability to set up, schedule, and manage signage content playlists, built-in content templates, content workflows, and approvals.
Security	Secured against misuse, exploitation, and vulnerability. The system should provide remote monitoring as well as role-based access.
Multi-Property	Ability to support multiple venues and properties with one centralized application content and management portal.
Visual Merchandising and Ambiance	Ability for interactive digital screens of any shape and size to display products, promotions, informational messaging, advertising, entertainment, etc.
Device/Network Management System	Ability to manage the digital media player devices, view the status of players via a dashboard, assign IP addresses, and update software.

## What does this mean?

The products assessed in this Vendor Landscape™ meet, at the very least, the requirements outlined as Table Stakes.

Many of the vendors go above and beyond the outlined Table Stakes, some even do so in multiple categories. This section aims to highlight the products' capabilities **in excess** of the criteria listed here.



Implementing a digital signage system is not without its challenges, involving more than simply selecting a suitable display. Other key variables to consider, include location, configuration, connectivity, and advanced features. If Table Stakes are all you need from your digital signage software solution, the only true differentiator for the organization is price. Otherwise, dig deeper to find the best price to value for your needs.

# Advanced features are the capabilities that allow for granular market differentiation

## Scoring Methodology

Info-Tech scored each vendor's features offering as a summation of its individual scores across the listed advanced features. Vendors were given one point for each feature the product inherently provided. Some categories were scored on a more granular scale with vendors receiving half points.

## Advanced Features

Feature	What we looked for:
Third-Party Advertising	Ability to support traffic reporting of signage network content playback for third-party advertiser's billing and verified network distribution.
Corporate and Internal Communication	Ability for a company to visually communicate and deliver corporate news, updates, mission-critical information, employee recognition, etc.
Wayfinding	Ability to build interactive, dynamic, or static maps to help customers quickly navigate venue. For casinos, should be to direct guests to their favorite game(s).
Real-time/Dynamic Menu	Ability to spotlight promotional items and integrate with a point-of-sale system to pull menu items and prices to engage customers at the point of purchase.
Emergency Alert Message Support	Ability to show pre-programmed messages, maps, alerts, and emergency instructions or other life-saving information throughout the entire network.
Multi-Language	Ability to display languages in a language other than English across both the customer-facing and the administration/CMS application UI.

For an explanation of how Advanced Features are determined, see [Information Presentation – Feature Ranks \(Stoplights\)](#) in the Appendix.

# Advanced features are the capabilities that allow for granular market differentiation (continued)

## Scoring Methodology

Info-Tech scored each vendor's features offering as a summation of its individual scores across the listed advanced features. Vendors were given one point for each feature the product inherently provided. Some categories were scored on a more granular scale with vendors receiving half points.

## Advanced Features

Feature	What we looked for:
Meeting Space or Room Display	Ability to automatically sort, filter, publish, and update events from the event software (e.g. Delphi, Daylight, Opera, Visual One).
NFC/Beacon/Facial Recognition Measurement	Ability to recognize and track a shopper, where they're standing, and trigger an intelligent, profile-based promotional experience.
Jackpot and Table Limit Signs	Ability to wirelessly update progressive slot meters and other jackpot signs and display table-game limits and information.
Video Wall	Ability to display advanced 4K video walls with no limitations on shape or size to create dynamic or interactive gestural wall.
Concierge	Ability to display an interactive touch screen that gives guest access to concierge services such as weather, flight information, and local attractions.

For an explanation of how Advanced Features are determined, see [Information Presentation – Feature Ranks \(Stoplights\)](#) in the Appendix.

# Each vendor offers a different feature set; concentrate on what your organization needs

Evaluated Features												
	Third-Party Advertising	Corporate & Internal Comm.	Wayfinding	Real-Time Dynamic Menu	Emergency Alert Support	Multi-Language	Meeting Space/Room Display	NFC, Beacon and Facial Recognition	Jackpot & Table Limit Signs	Video Wall	Concierge	Media Player Agnostic
22 Miles	●	●	●	●	●	●	●	●	●	●	●	●
Appspace	●	●	●	●	●	●	●	●	●	●	●	●
Barco X20	●	●	●	●	●	●	●	●	●	●	●	●
BroadSign	●	●	●	●	●	●	●	●	●	●	●	●
Carmanah Signs	●	●	●	●	●	●	●	●	●	●	●	●
CastNET	●	●	●	●	●	●	●	●	●	●	●	●
<b>Legend</b>	● =Feature fully present				● =Feature partially present/pending				● =Feature absent			

For an explanation of how Advanced Features are determined, see [Information Presentation – Feature Ranks \(Stoplights\)](#) in the Appendix.

# Each vendor offers a different feature set; concentrate on what your organization needs (continued)

Evaluated Features												
	Third-Party Advertising	Corporate & Internal Comm.	Wayfinding	Real-Time Dynamic Menu	Emergency Alert Support	Multi-Language	Meeting Space/Room Display	NFC, Beacon and Facial Recognition	Jackpot & Table Limit Signs	Video Wall	Concierge	Media Player Agnostic
<b>DISE</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Four Winds</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>JANUS Displays</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Nanonation</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Paltronics</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Scala</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Scientific Games</b>	●	●	●	●	●	●	●	●	●	●	●	●
<b>Legend</b>	● =Feature fully present				● =Feature partially present/pending				● =Feature absent			

For an explanation of how Advanced Features are determined, see [Information Presentation – Feature Ranks \(Stoplights\)](#) in the Appendix.

# Increase revenue, loyalty, and experiences by recognizing your guests and delivering customized promotions to them

Use IoT technologies such as sensors, beacons, NFC, or gesture/facial recognition to identify guests and deliver content directly to their phones or surrounding players.

## 1 IoT and Big Data for Event-Driven Content

2

3

### Why Scenarios?

In reviewing the products included in each Vendor Landscape™, certain use cases come to the forefront. Whether those use cases are defined by applicability in certain locations, relevance for certain industries, or as strengths in delivering a specific capability, Info-Tech recognizes those use cases as Scenarios, and calls attention to them where they exist.

#### NFC – Personalized Marketing and Promotions



#### NFC – Coupons



#### Facial Recognition Capability



For an explanation of how Scenarios are determined, see [Information Presentation – Scenarios](#) in the Appendix.



# Global digital signage solutions often require language modules to be completely functional in all deployed locations

## Why purchase a digital signage solution that can manage content in only one language?

1

## 2 Language Localization

3

### Why Scenarios?

In reviewing the products included in each Vendor Landscape™, certain use cases come to the forefront. Whether those use cases are defined by applicability in certain locations, relevance for certain industries, or as strengths in delivering a specific capability, Info-Tech recognizes those use cases as Scenarios, and calls attention to them where they exist.

### Exemplary Performers



22 Mile's Publisher Pro is capable of displaying all left-to-right and right-to-left languages through integrated Google Translate.



Due to Scala's global presence, its Digital Communication Software is capable of managing media content in over 19 languages.



The Showcase UI is available in numerous languages including French, English, Spanish, and Portuguese.

For an explanation of how Scenarios are determined, see [Information Presentation – Scenarios](#) in the Appendix.

# Enhance the safety of your casino or hotel operations by deploying a solution capable of displaying emergency messages

**The ability to display an emergency message in real time could be the difference between life and death for your staff and guests – why risk it?**

1

2

## 3 Emergency Message Support

### Why Scenarios?

In reviewing the products included in each Vendor Landscape™, certain use cases come to the forefront. Whether those use cases are defined by applicability in certain locations, relevance for certain industries, or as strengths in delivering a specific capability, Info-Tech recognizes those use cases as Scenarios, and calls attention to them where they exist.

### Exemplary Performers



**X2O**

X2O enables operators to send localized emergency messages directly to desktops, mobile phones, digital displays, and video walls.



A full content override and alert function is natively built into the Four Winds Content Manager. Specific channels can be designed to dynamically switch to emergency content when necessary.



Showcase can display emergency messages upon demand across the entire network. Showcase can also integrate with Amber Alert systems.

For an explanation of how Scenarios are determined, see [Information Presentation – Scenarios](#) in the Appendix.

# FWI is a strong gaming player based on its focus on developing innovative digital signage features

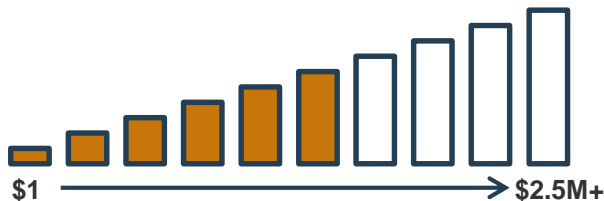


## Champion

Product: Content Manager 5.2.1  
Employees: 350+  
Headquarters: Denver, CO  
Website: [fourwindsinteractive.com](http://fourwindsinteractive.com)  
Founded: 2005  
Presence: Privately Held



3 year TCO for this solution falls into pricing tier 6, between \$100,000 and \$250,000



Pricing provided by vendor

## Overview

Four Winds Interactive (FWI) is a significant player in visual communications (more than 500,000 signs deployed globally) to build, deploy, and manage visual applications across enterprise digital signs, interactive kiosks, desktop, web, and mobile.

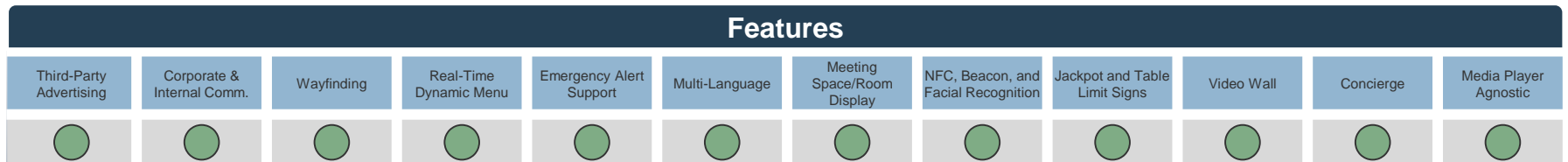
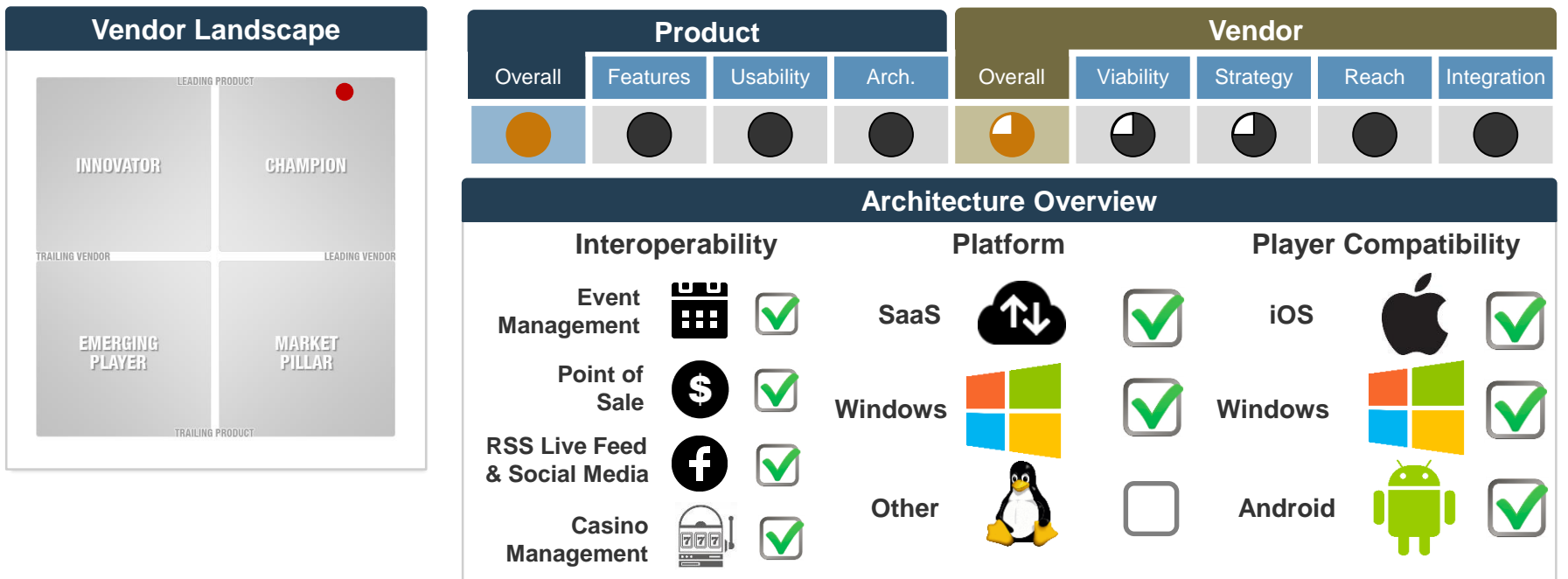
## Strengths

- Content Manager 5.2.1 provides a single platform that integrates with your back-end POS, property management, event management, gaming management, and other workplace management systems to deliver on nearly all advanced features.
- Content Manager 5.2.1 is an intuitive and sleek UI that enables easy, intuitive content creation as well as content management across the network.
- The FWI Apps Store offers numerous apps that deliver templates, signs, feeds, etc. to be dynamically incorporated into content.
- FWI is committed to delivering an industry-leading digital signage solution with a staff of 26 developers that release minor upgrades quarterly and full upgrades annually.

## Challenges

- Content Manager 5.2.1 UI is only available in English, however, content can be displayed in any language. Support is also only available in English.
- The comprehensiveness of the FWI solution requires a slightly longer deployment time relative to competitors at approximately 12-18 weeks.

# Content Manager 5.2.1 delivers impressive deployment options and integration with nearly all third-party solutions



## Info-Tech Recommends:

Because of its innovative content management and modern user interface, Info-Tech recommends Content Manager 5.2.1 to casinos seeking out solutions that are simple to operate. With the ability to deliver on nearly all advanced features and the ability to integrate with nearly all operational systems, FWI should be strongly considered by operators looking to maximize the value of their digital signage solution.

# Nanonation is committed to ensuring customer reliability and simple network management features



## Champion

Product: Showcase  
Employees: 50  
Headquarters: Lincoln, NE  
Website: [nanonation.net](http://nanonation.net)  
Founded: 2000  
Presence: Privately Held



The vendor declined to provide pricing, and publicly available pricing could not be found

### Overview

Nanonation is an established provider of digital communication and visualization solutions. Nanonation serves primarily the retail, hospitality, entertainment, and financial services sector and has deployed more than 40,000 displays globally.

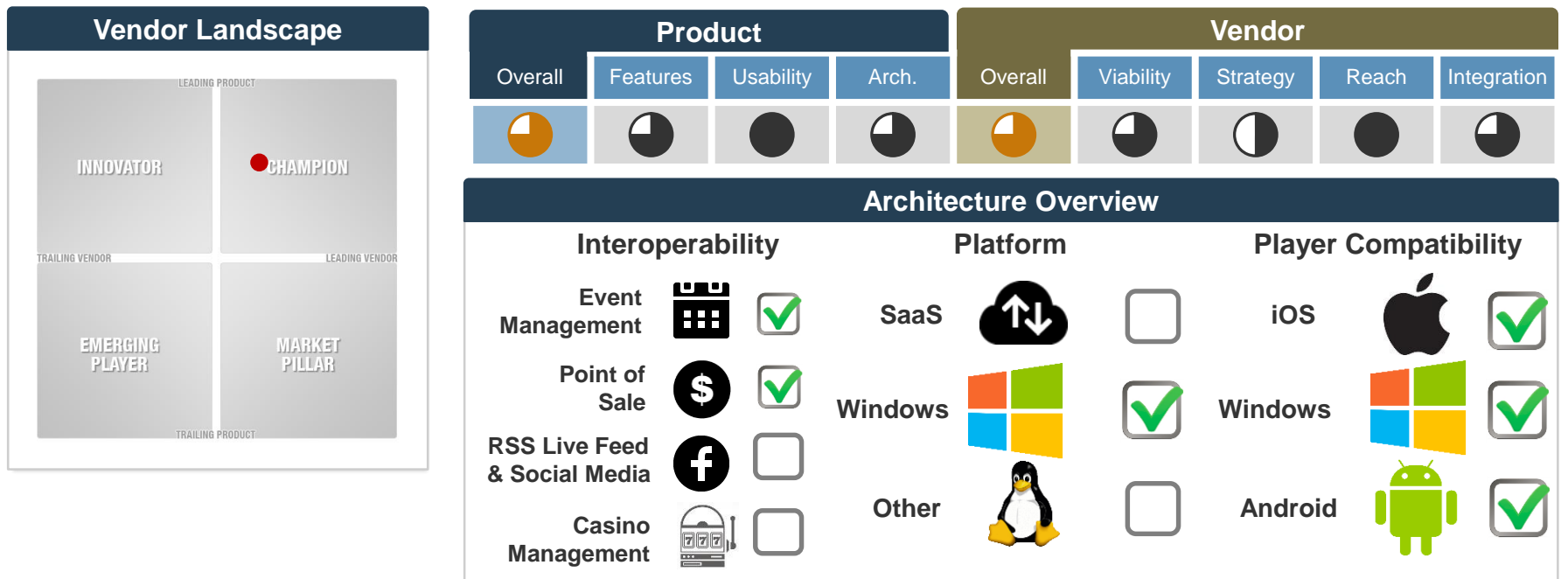
### Strengths

- Nanonation's corporate mission revolves around reliability. Nanonation offers 24/7 support and a watchdog component to report on issues. Ninety-five percent of issues are resolved within 24 hours.
- Nanonation has partnered with strong hardware vendors such as Dell to ease implementation of a digital signage network.
- Showcase effectively integrates with property management, event management, POS, and other systems to improve functionality.
- Showcase provides great content creation and management tools that are intuitive and easy to use. The UI has a simple drag-and-drop editing feature and is available in English, French, Spanish, and Portuguese.

### Challenges

- Showcase lacks specific features for internal communication such as the ability create a virtual receptionist or display room/event management digital signs.
- Gaming is not a primary focus and therefore the ability to display table limits, update progressive slot meters, and broadcast jackpot winners is not something that Nanonation has done previously.

# Showcase is a robust Windows-based digital signage solution that offers extensive player and system integration options



## Info-Tech Recommends:

Nanonation has become popular with organizations looking for a reliable, functional, and compatible digital signage solution that delivers on many advanced features. While relatively new to the industry, Info-Tech believes that Nanonation will continue to deliver and will develop solutions to all advanced features as it continues to mature and its existing casino customers expand and push the limits of Showcase's features.

# 22 Miles is becoming a strong market player through its focus on the user experience and product features

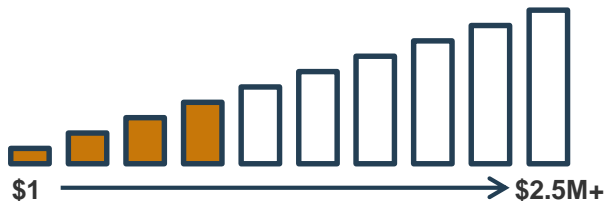


## Champion

Product: Publisher Pro 4  
Employees: 40  
Headquarters: Milpitas, CA  
Website: [22miles.com](http://22miles.com)  
Founded: 2007  
Presence: Privately Held



3 year TCO for this solution falls into pricing tier 4, between \$25,000 and \$50,000



Pricing provided by vendor

## Overview

22 Miles, a relatively new digital signage provider, places priority on creating an integrated end-user experience. 22 Miles is expanding its global operations and has solidified its place in the market through continuous growth.

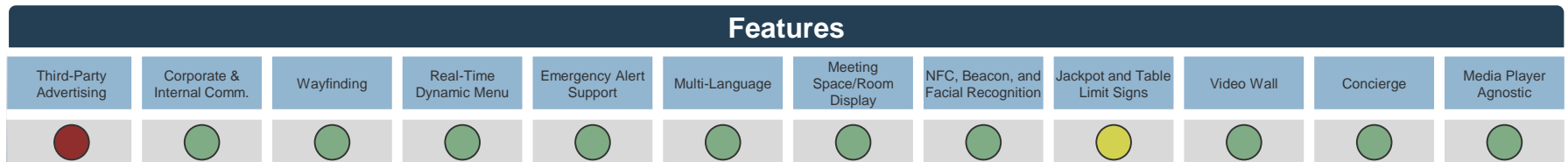
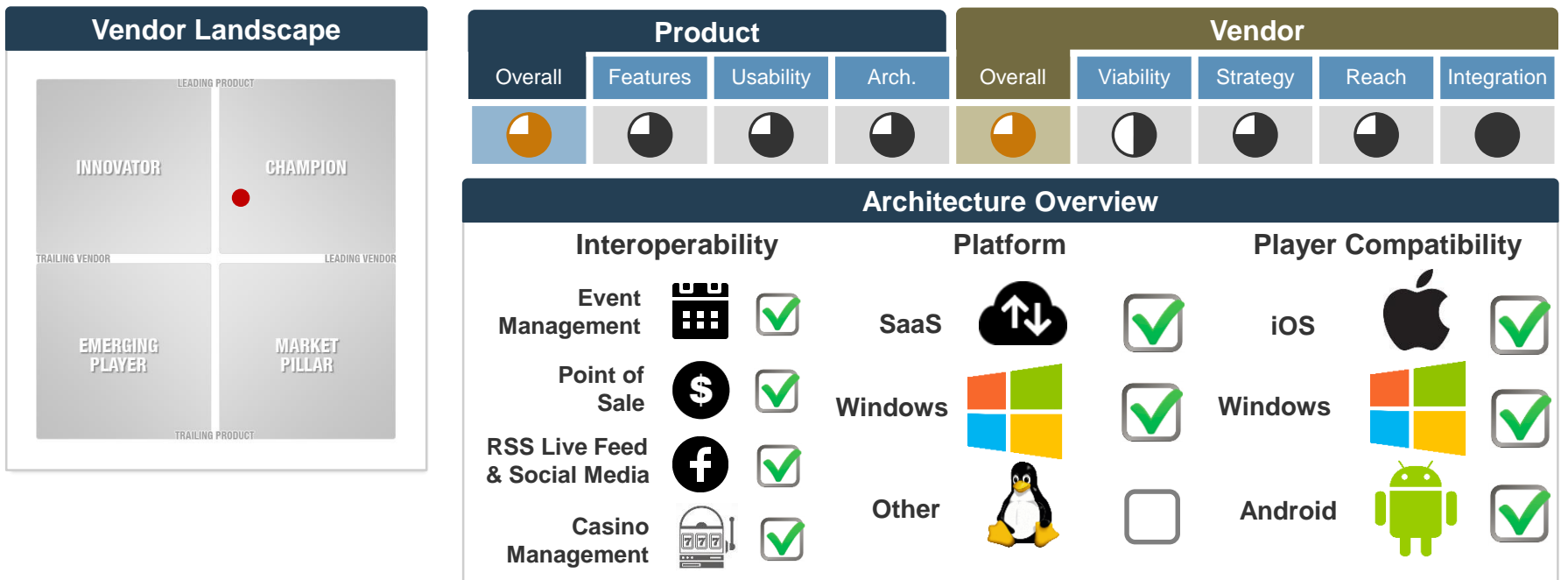
## Strengths

- 22 Miles places significant emphasis on developing innovative user wayfinding features, investing heavily in product development. Wayfinding features include 3D model rendering, interactive buildings, 360-degree panoramas, navigation, etc.
- Publisher Pro 4 integrates with a variety of third-party solutions such as PMS, POS, and EMS, effectively improving the functionality of players as well as the overall user experience.
- Video walls can be deployed as interactive and in any resolution, design, or orientation.
- Publisher Pro 4 natively supports all “left-to-right” languages.

## Challenges

- Pro Publisher 4 reporting does not support proof-of-play traffic; rather it reports interactive usage and keyword searches.
- Product support, although free for the first year, must be purchased for extended contracts and is only available in English.
- While making inroads with some casinos, 22 Miles lacks significant experience with casino deployments.

# Publisher Pro delivers impressive wayfinding capabilities and integration with third-party solutions



## Info-Tech Recommends:

Casinos and hotels that are looking for a full-service offering of digital signage capabilities, particularly wayfinding, and the ability to easily integrate with other in-house systems should consider 22 Miles' Publisher Pro. 22 Miles promotes simplicity via complete integrations with numerous operational systems, substantially improving the customer experience.



# BroadSign is committed to customer security and ease of use, offering a best-in-class cloud solution



## **Champion**

Product: BroadSign Digital Signage Software  
Employees: 51-200  
Headquarters: Montreal, Canada  
Website: [broadsign.com](http://broadsign.com)  
Founded: 2004  
Presence: Privately Held



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

BroadSign, a cloud-based provider of digital signage solutions to customers in over 40 countries, was purchased by JedFam Group in 2012. Its platform powers over 120,000 displays in venues such as airports, cinemas, shopping malls, and offices.

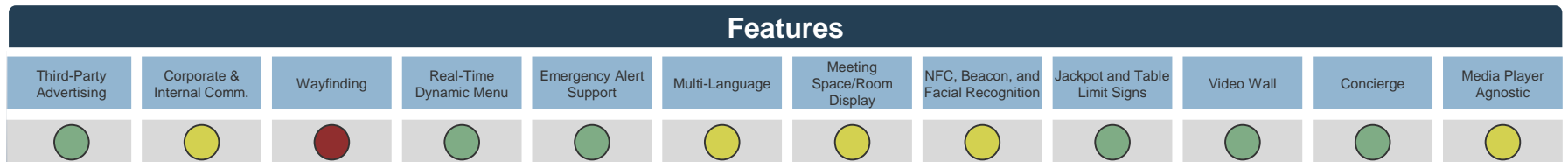
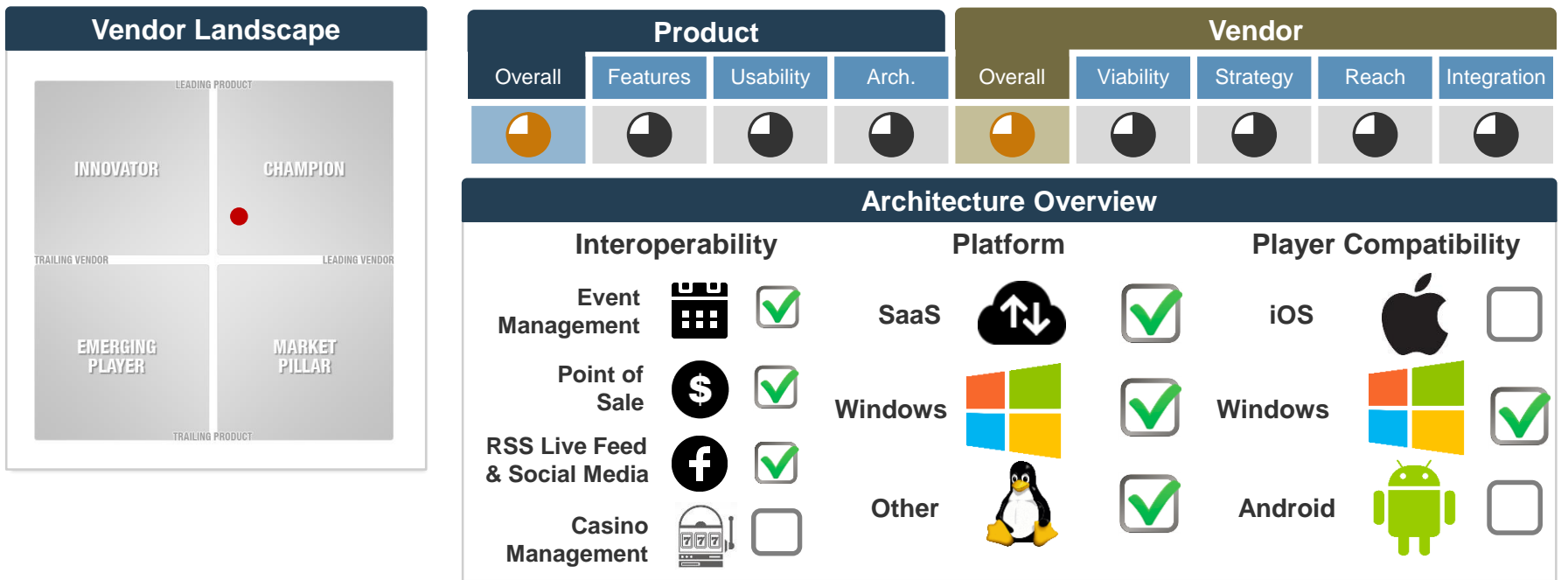
## Strengths

- BroadSign offers a best-in-class cloud solution through one of the industry's most secure networks.
- 8K+ video walls can be offered in any orientation and configuration.
- BroadSign Mobile provides mobile integration to allow operators the ability to recognize and dynamically market to customers through NFC and other methods.
- BroadSign is thoroughly committed to product development, offering product upgrades as part of the SaaS model.

## Challenges

- BroadSign offers some advanced features such as wayfinding, event management, social media/RSS feeds, and NFC customer engagement through partnerships with third-party vendors.
- BroadSign does not offer an on-premise or private cloud solution.
- Hours of support are limited by operational hours of North American and European offices.

# BroadSign's ability to effectively meet table stakes features makes it a serious consideration for many operators



## Info-Tech Recommends:

Casinos, hotels, and restaurants looking for a secure, cloud-based digital signage solution that effectively delivers on all table stakes features and advanced digital menu, advertising, and video wall features should consider BroadSign Digital Signage Software. Although the solution lacks many advanced features in its native deployment, most features can be integrated via third parties for a truly unique and customized solution.

# With a long-tenured market focus, CastNET is able to deliver true value to its gaming customers

## Market Pillar

Product: CastNET Casino  
Employees: 51-200  
Headquarters: Eden Prairie, MN  
Website: [castnet.com](http://castnet.com)  
Founded: 1970  
Presence: Privately Held



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

CastNET, a division of Alpha Video and Audio, has been specializing in digital signage content creation and management since the early 90s. CastNET is deployed at casino properties around the world including Holland, Malaysia, Italy, and the US.

## Strengths

- Alpha Video and Audio is a long-standing vendor in digital signage as one of the first vendors to the market and provides solutions to casino properties all over the world including Holland, Malaysia, Singapore, Italy, and the US.
- CastNET Casino successfully interfaces with POS and other casino management systems as well as NFC to offer dynamic promotions including dynamic coupons and progressive jackpots.
- CastNET Casino can be offered on premises or through the secure CastNET cloud.

## Challenges

- The CastNET Casino solution requires additional software add-ins to provide desired functionality. For example, progressive table signs (GameView) is an optional product available for separate purchase.
- The solution is not typically used to display retail and other promotional messages and therefore lacks the ability to report on reach and frequency statistics.
- Support is limited to 8am-5pm CT. Upgraded support must be purchased through the Assurance Plus Program.

# CastNET Casino offers extensive integration with other gaming systems for a unique customer experience



Product				Vendor				
Overall	Features	Usability	Arch.	Overall	Viability	Strategy	Reach	Integration

**Architecture Overview**

Interoperability		Platform		Player Compatibility	
Event Management	<input checked="" type="checkbox"/>	SaaS	<input checked="" type="checkbox"/>	iOS	<input checked="" type="checkbox"/>
Point of Sale	<input checked="" type="checkbox"/>	Windows	<input checked="" type="checkbox"/>	Windows	<input checked="" type="checkbox"/>
RSS Live Feed & Social Media	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>	Android	<input type="checkbox"/>
Casino Management	<input checked="" type="checkbox"/>				

**Features**

Third-Party Advertising	Corporate & Internal Comm.	Wayfinding	Real-Time Dynamic Menu	Emergency Alert Support	Multi-Language	Meeting Space/Room Display	NFC, Beacon, and Facial Recognition	Jackpot and Table Limit Signs	Video Wall	Concierge	Media Player Agnostic

## Info-Tech Recommends:

CastNET Casino is recommended for casino resorts seeking a digital signage solution aimed at the gaming industry. The solution can easily and quickly display all casino-related signs such as table-limit signs, progressive jackpots, player promotions, and retail advertisements. However, the solution is not meant to track and report on third-party advertising.

# Predominately Australia and Asia focused, Paltronic delivers a strong, intuitive operator user interface

## Market Pillar

Product: One Link Media  
Employees: 11-50  
Headquarters: Sydney, Australia  
Website: [paltronics.com.au](http://paltronics.com.au)  
Founded: 1999  
Presence: Privately Held



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

Paltronic, a strong player in the Asian and Australian gaming industry since 1999 but able to provide products world-wide including North America, focuses primarily on slot-bonusing tech, progressive slot meters, and table-game signs.

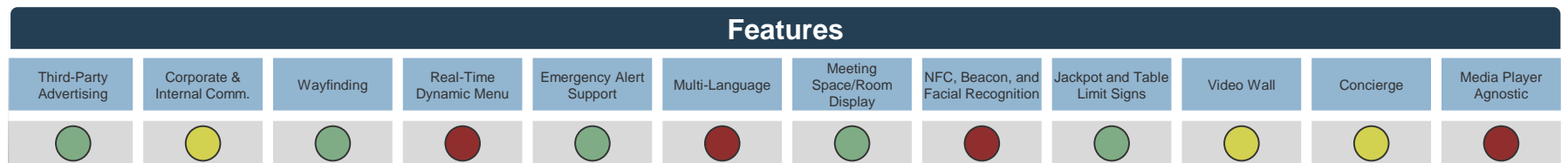
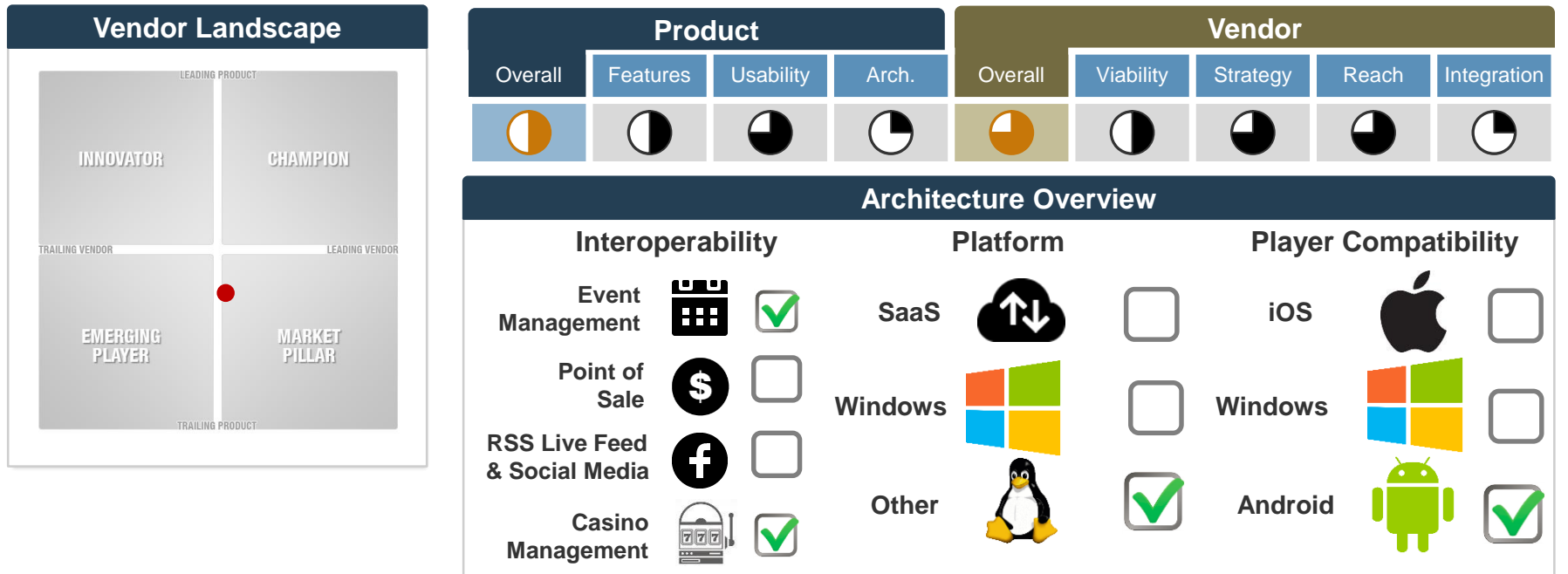
## Strengths

- Paltronic has the ability to link to many third-party systems and several CMS systems.
- One Link Media System also integrates with the One Link Slot System, providing extensive flexibility on gaming operations.
- Paltronic places significant focus on customer experience, investing heavily in product development as well as 24/7 support.
- One Link is designed with usability in mind. The UI is a WYSIWYG layout with drag-and-drop capabilities.
- Aristocrat purchased Paltronic's USA assets and IP to further develop and integrate with the Aristocrat ecosystem while also executing a distribution relationship with Paltronic Australasia.

## Challenges

- One Link is unable to provide advanced concierge and virtual receptionist features, limiting the interactive nature of the system.
- Beyond casino promotions, One Link does not leverage NFC or beacons for triggering the display of customized promotions.
- IT departments will need to know that the One Link solution player and head-end server technology is based on Ubuntu Linux.

# Through integration with several CMSs, One Link Media provides best-in-class gaming digital signage



## Info-Tech Recommends:

With integration to several CMS solutions, One Link Media is best suited for casinos seeking a purely gaming digital signage solution. If you are looking for a solution with wayfinding and jackpot signs, Paltronics is an excellent shortlist candidate.

# Scientific Games designs and develops software to display, automate, and track signs specific to the gaming industry

## Market Pillar

Product: CoolSign  
Employees: 3,000+  
Headquarters: Las Vegas, NV  
Website: [scientificgames.com](http://scientificgames.com)  
Founded: 1968  
Presence: NASDAQ: SGMS



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

Scientific Games acquired Bally Technologies in 2014 and is a global provider of slots, video machines, casino management systems, and networked solutions for the lottery and gaming industry. Bally acquired Planar Systems Inc.'s CoolSign digital signage business in 2008.

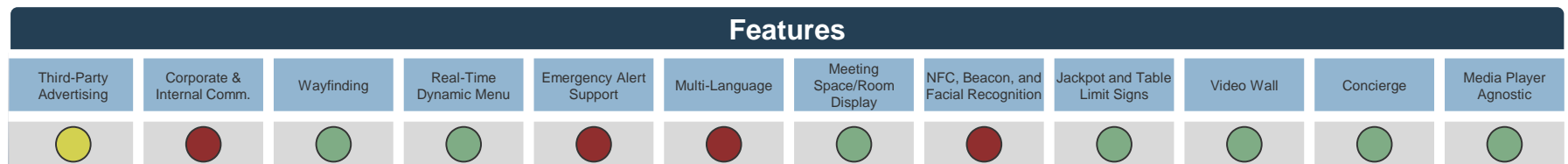
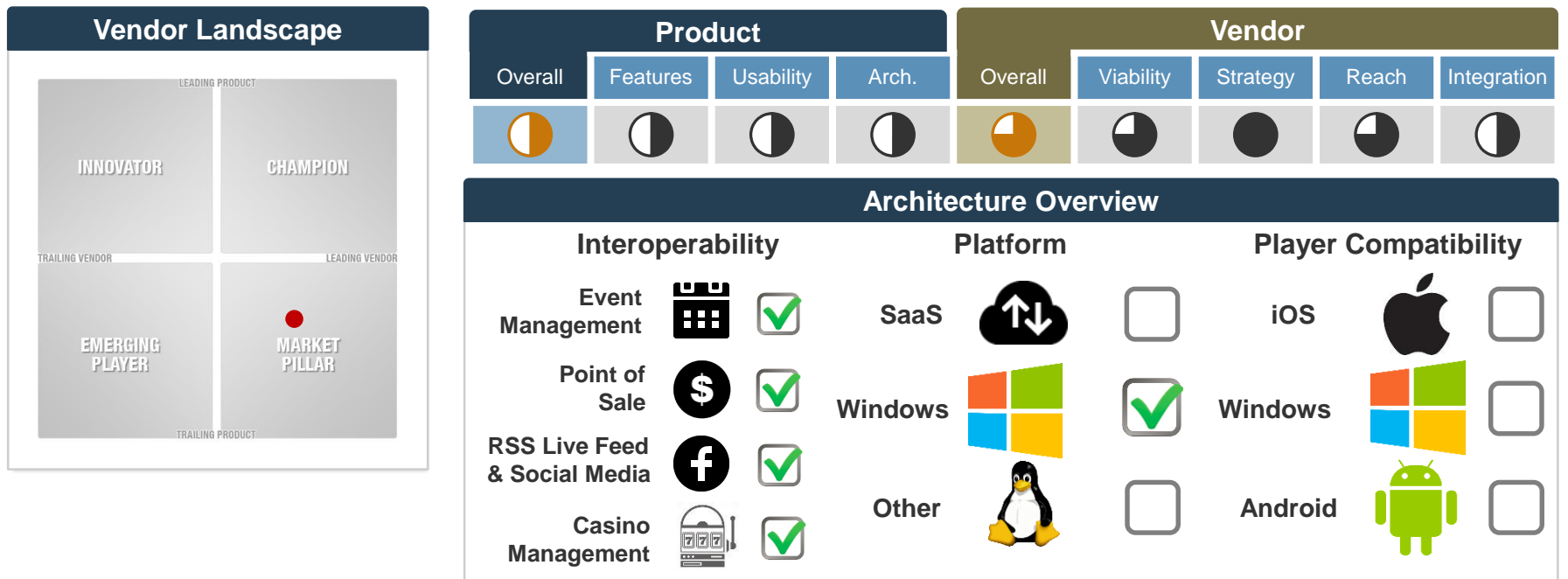
## Strengths

- The CoolSign Wayfinder is a navigation tool designed specifically for the gaming industry and is capable of displaying game locations, restaurants, etc. A concierge service allows customers to make theatre reservations, dinner reservations, etc.
- CoolSign is capable of integrating with POS systems as well as the Bally CMS to effectively market to player club tiers.
- CoolSign is capable of displaying dynamic gaming promotions, progressive table/slot jackpots, and table min/max.
- CoolSign hardware is offered with a three-year warranty.
- Bally is committed to offering innovative features through CoolSign with over 15 developers and a support staff of over 100.

## Challenges

- Although Bally offers 24/7 support, a recurring concern from clients was the vendor's nonchalant attitude towards issues. This is also illustrated by the aged instructional videos via YouTube.
- Bally is focused primarily on casinos with 119 global deployments.
- Proof-of-play reporting requires Bally Business Intelligence.

# The CoolSign solution provides a Windows platform that is capable of integrating with numerous operational systems



## Info-Tech Recommends:

Large casinos looking for a Windows-based digital signage solution with a full-service offering for promotional gaming functionality and gaming floor wayfinding should consider Bally CoolSign. Casinos operating Bally CMS should consider deploying Bally CoolSign for enhanced marketing, reporting, and potential cost synergies.



# Carmanah Signs is committed to guest experience as reflected in its comprehensive integration capabilities

## Market Pillar

Product: ActiVia  
Employees: 11-50  
Headquarters: Calgary, Canada  
Website: [carmanahsigns.com](http://carmanahsigns.com)  
Founded: 1993  
Presence: Privately Held



The vendor declined to provide pricing, and publicly available pricing could not be found

## Overview

Carmanah Signs was acquired by StrataCache in November 2013. Carmanah Signs is an established market provider of digital signage in the lottery and gaming sector with over 100,000 jackpot signs deployed in over 500 casinos globally.

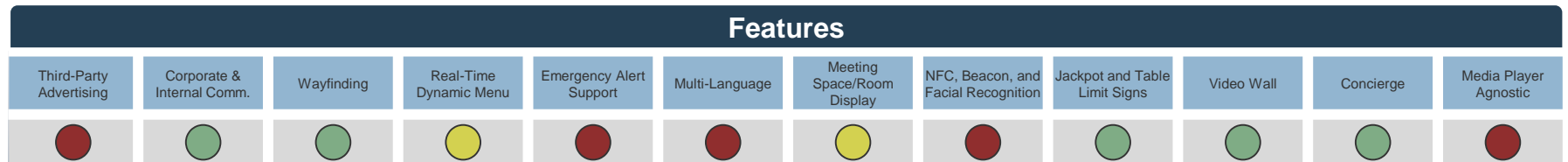
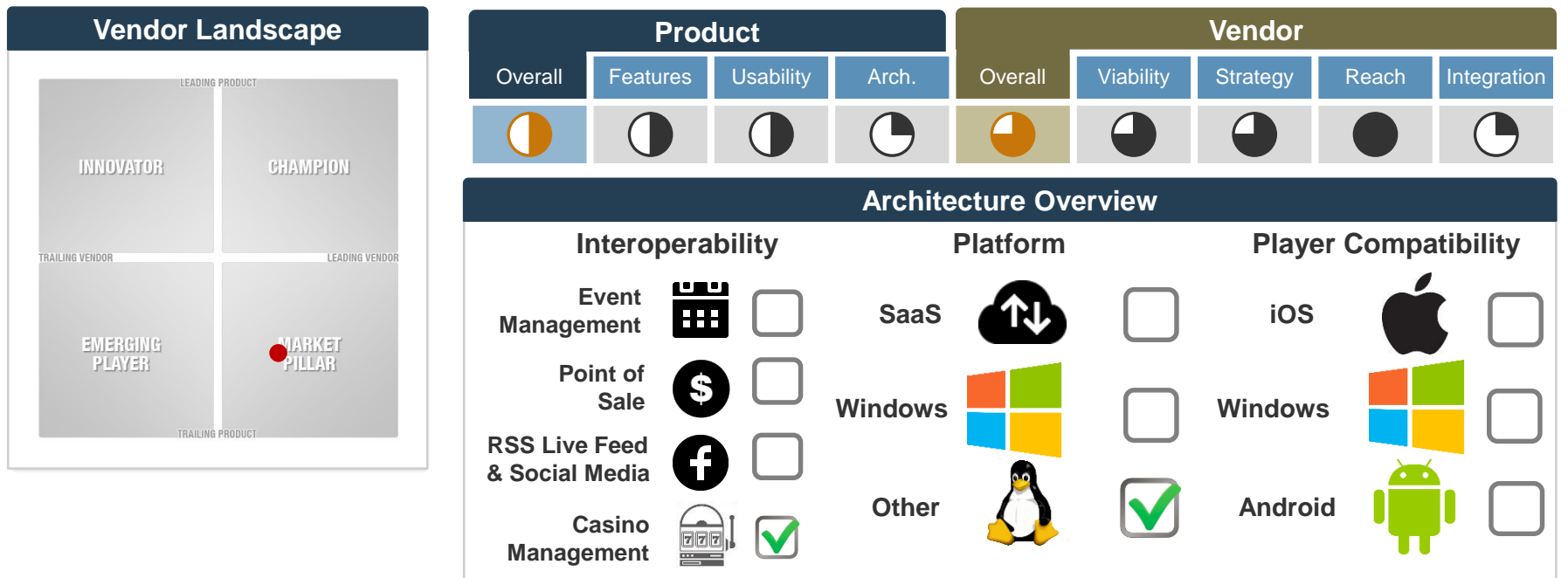
## Strengths

- Carmanah Signs is focused on delivering a rich operator experience through basic and advanced training courses, flexible deployment options, and 24/7/365 support options.
- ActiVia is effectively scalable with deployment options from less than ten players into the thousands.
- ActiVia's platform offers comprehensive virtual concierge features that can display individual player reward programs, promotions, social games, and hotel/event check-in.
- ActiVia is capable of dynamically integrating with POS and CMS systems to display real-time promotions and table-limit signs.

## Challenges

- Beyond CMS integrations, ActiVia is unable to provide real-time or customized promotions through NFC, RFID, or beacon signaling.
- Although signs are deployed globally, the UI is only available in English.

# ActiVia provides industry-leading promotional gaming signs through scalable deployment options



## Info-Tech Recommends:

Carmanah Signs' understanding of the gaming industry enabled it to create the unique ActiVia digital signage solution. The solution is recommended for casinos looking to integrate it with gaming and hospitality systems to maximize operational efficiency and the guest's overall experience.

# JANUS Displays has experienced industry-wide success through quality solutions and customer service

## Market Pillar

Product: VIZIA  
Employees: 51-200  
Headquarters: St. Petersburg, FL  
Website: [janusdisplays.com](http://janusdisplays.com)  
Founded: 1987  
Presence: Privately Held



The vendor declined to provide pricing, and publicly available pricing could not be found

## Overview

Morrow Technologies, a long-standing vendor in the visual communications space, launched JANUS Displays in 1987, which services digital signage needs of hospitals, hotels, universities, and casinos.

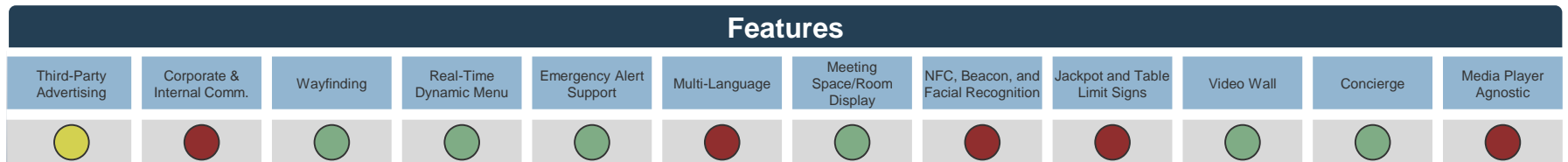
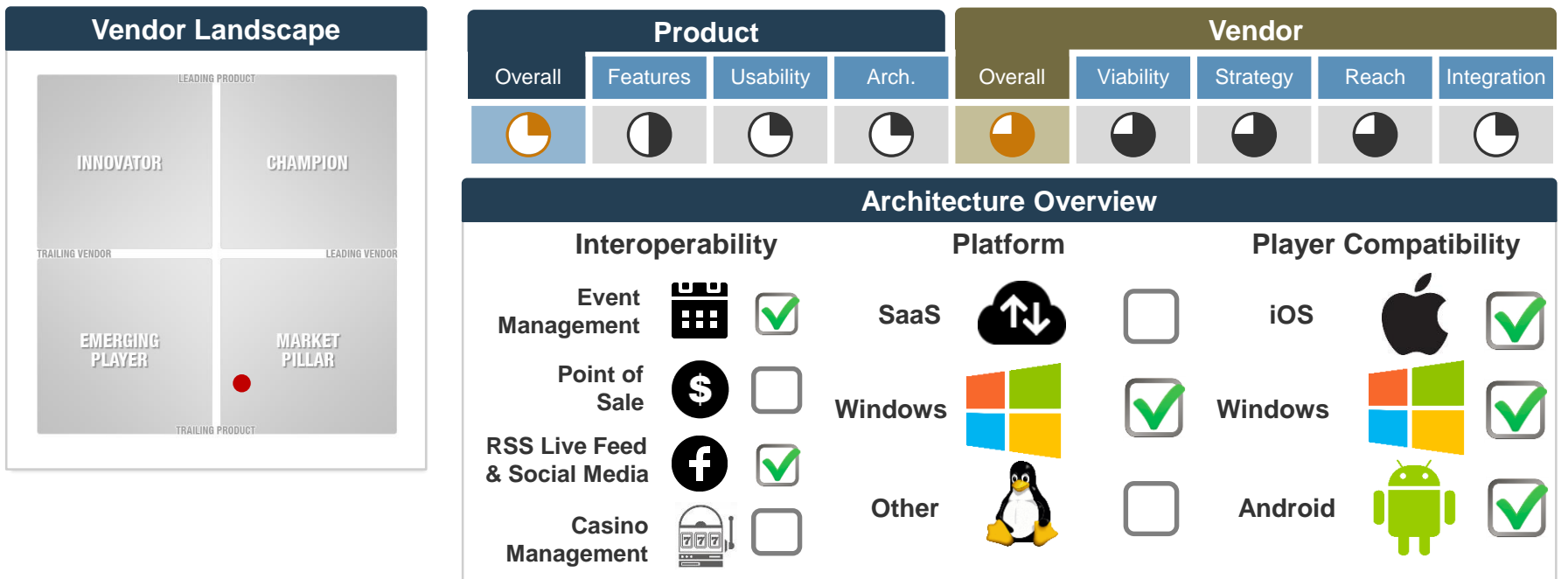
## Strengths

- JANUS offers innovative wayfinding capabilities – including the ability to create paths for customers based on destinations. The solution can forward guests directions in an email or SMS for a truly interactive experience. Wayfinding maps are also capable of displaying evacuation maps during emergency alerting.
- JANUS Concierge Board is a best-in-class interactive concierge capability that enables customers to check into hotels and flights, make dinner reservations, or explore local attractions/amenities.
- VIZIA offers 24/7 support and comes with a one-year warranty.

## Challenges

- JANUS Displays does not report VIZIA's ability to integrate with property management, point of sale, or casino management systems.
- The VIZIA platform is only offered in English.
- VIZIA is not media-player agnostic and therefore to deploy the solution customers must purchase one of four JANUS Displays digital signage controllers. Info-Tech members have stated that these players are relatively expensive to purchase and repair.

# VIZIA offers diverse player options and competitively delivers on wayfinding and event management integrations



## Info-Tech Recommends:

JANUS Displays is ideal for hotels and casinos looking for a truly interactive guest experience since it offers complete concierge services, wayfinding, and meeting-space board capabilities. Although JANUS offers value and a strong package of table stakes, the solution does lack the ability to offer real-time promotions (NFC and POS integrations) and must be delivered on JANUS' specific media player hardware.

# Scala has experienced global success through scalable and functionally effective digital signage solutions

## **Innovator**

Product: Scala Digital Communication Software  
Employees: 51-200  
Headquarters: Malvern, PA  
Website: [scala.com](https://scala.com)  
Founded: 1987  
Presence: Privately Held



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

As a pioneer in the industry with more than 500,000 signs throughout 100 countries, Scala has over 25 years of digital signage experience across wide-ranging industries like retail, finance, education, healthcare, and gaming.

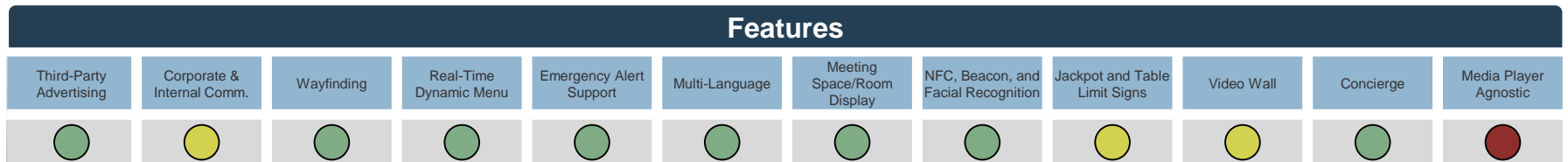
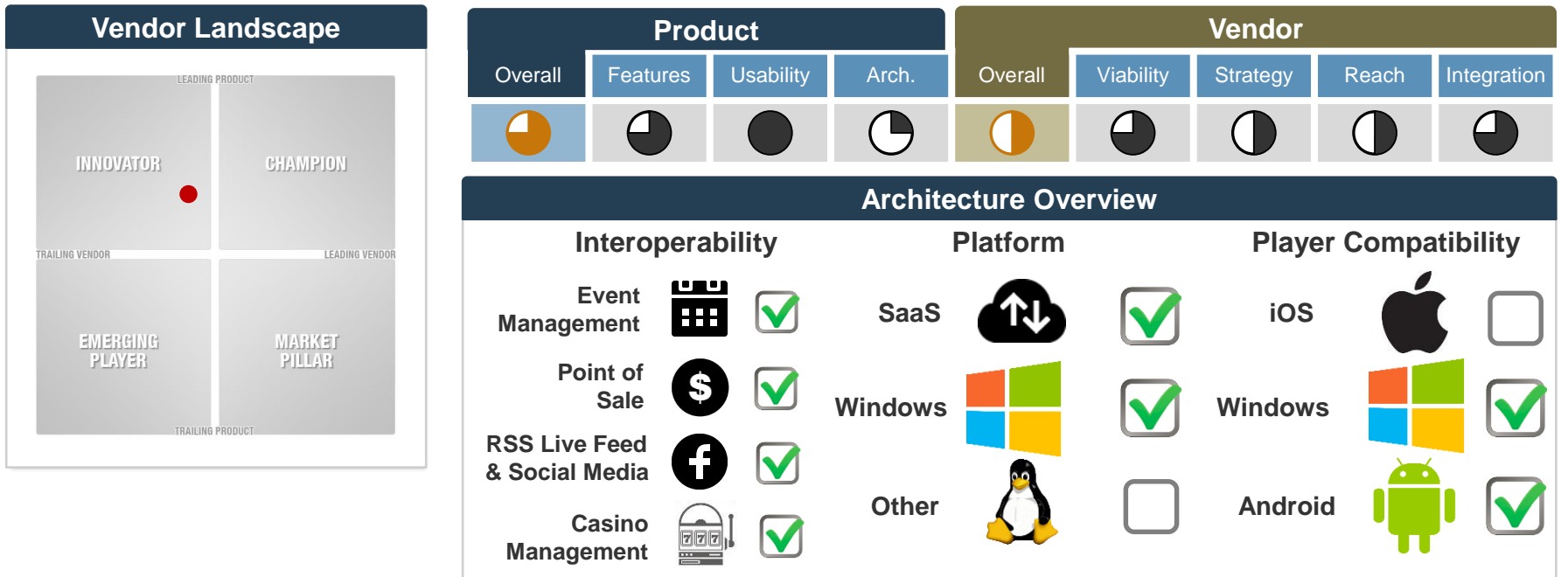
## Strengths

- Capable of interfacing with virtually any data source through its web-based platform, Scala Digital Communication Software can integrate with inventory, event management, and POS systems.
- Scala offers a wide variety of content building options with the ability input your own content or use Scala content. Through an intuitive UI creators can preview content, utilize hundreds of effects, and even deliver content through live streams.
- Scala offers real-time promotional marketing with the ability to deliver in-store coupons through NFC, QR, or RFID.
- The Scala UI is available in 19 languages.
- Extensive world-wide partner and developer network.

## Challenges

- Although global, Scala support is only available in your local region 9am-5pm. Support is incident based and is available at a cost. The Scale Maintenance module must be purchased independently to receive bug fixes and enhancements.
- Scala lacks the ability to display real-time table game signs and progressive jackpots for gaming customers.

# Scala's Digital Communication Software is a great web-based solution that can be deployed in 19 languages



## Info-Tech Recommends:

With its intuitive user interface, broad offering of advanced features, and dedication to product development and support, Scala is likely to continue gathering momentum. Scala is an excellent shortlist candidate for casinos and hotels looking for a digital signage solution that can be deployed and managed globally.

# X2O Media is committed to providing innovative solutions to customized promotional marketing

## **Innovator**

Product: X2O Platform  
Employees: 1,000-5,000  
Headquarters: Kortrijk, Belgium  
Website: [barco.com](http://barco.com)  
Founded: 1934  
Presence: EBR:BAR



## Overview

X2O Media was acquired by the visualization giant Barco in 2014. Founded in 1934, Barco has a global reach with clients in a variety of industries including venues, hospitality, healthcare, and education. X2O Media continues to place significant emphasis on research and development, constantly enhancing its feature set.

## Strengths

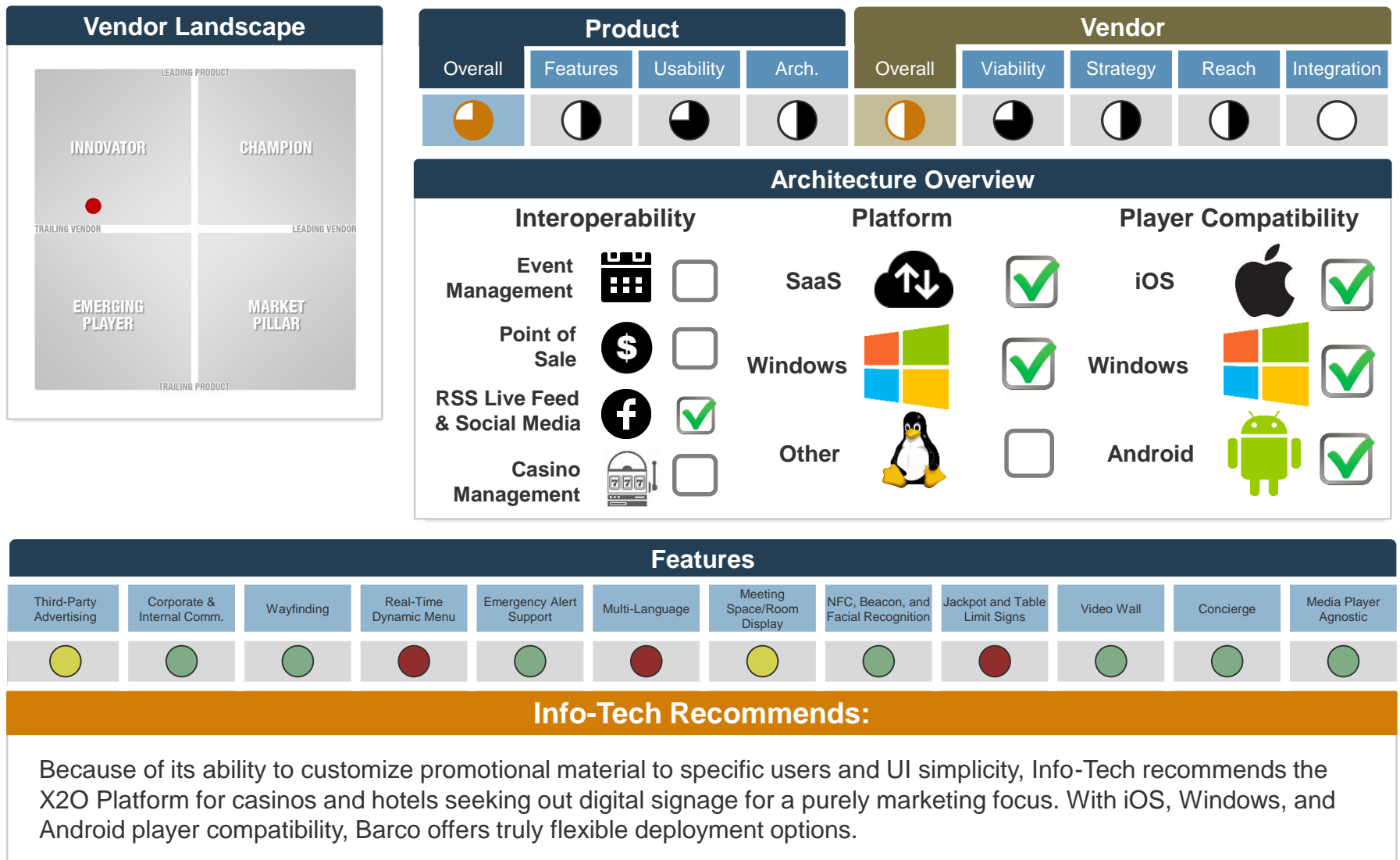
- X2O provides a sophisticated instantaneous emergency messaging capability with the ability to send alerts to mobile phones, desktops, and other digital displays.
- X2O can utilize smart algorithms and RFID, iBeacons, NFC, etc. information to display truly personalized and custom promotions based on gender, age, height, etc. of users.
- Through X2O's intuitive administrative UI, operators can easily create complex and customized content from a library of graphic elements such as such as 3D animations, HD videos, etc.

## Challenges

- Info-Tech identified numerous gaps on X2O's ability to integrate with property management, point of sale, casino management, and event management systems.
- Hours of support are currently limited to only 8am-8pm in the Americas and EMEA.

**The vendor declined to provide pricing, and publicly available pricing could not be found**

# The X2O Platform delivers a functionally impressive content management platform through a modern, intuitive UI





# Predominately European-focused, DISE is an easy-to-implement and scalable digital signage solution

## Emerging Player

Product: DISE Professional  
Employees: 11-50  
Headquarters: Karlstad, Sweden  
Website: [dise.com](http://dise.com)  
Founded: 2005  
Presence: Privately Held



**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

DISE, a Swedish organization founded in 2004, has amassed a strong presence in over 30 countries and more than 10,000 licenses throughout the world. DISE focuses on scalable digital signage solutions in transport, finance, retail, and government.

## Strengths

- Implementation of DISE products is quick and comprehensive. DISE will recommend relevant hardware, appropriate number of displays, and display placement based on customer needs.
- DISE offers three alternative solutions that are deployed based on the complexity of respective deployment. Simple deployments are offered through cloud whereas larger, complex, and customized deployments can be self-hosted or cloud-based.
- The DISE product is easily customized with the development of unique features available at the discretion and cost of customer.
- DISE products are capable of integrating with nearly any operational system including event management, ERP, etc.

## Challenges

- Although DISE players can display third-party advertisements, the content management system lacks the ability to capture frequency metrics such as proof of play or offer real-time, personalized promotions through NFC, beacon, or RFID.
- Gaming is not a primary focus and therefore the ability to display table limits, update progressive slot meters, and broadcast jackpot winners may be limited.

# Excellent deployment options, system integrations, and player compatibility make DISE a consideration for operators



Product				Vendor				
Overall	Features	Usability	Arch.	Overall	Viability	Strategy	Reach	Integration

Architecture Overview					
Interoperability		Platform		Player Compatibility	
Event Management	<input checked="" type="checkbox"/>	SaaS	<input checked="" type="checkbox"/>	iOS	<input checked="" type="checkbox"/>
Point of Sale	<input type="checkbox"/>	Windows	<input checked="" type="checkbox"/>	Windows	<input checked="" type="checkbox"/>
RSS Live Feed & Social Media	<input checked="" type="checkbox"/>	Other	<input type="checkbox"/>	Android	<input checked="" type="checkbox"/>
Casino Management	<input type="checkbox"/>				

Features											
Third-Party Advertising	Corporate & Internal Comm.	Wayfinding	Real-Time Dynamic Menu	Emergency Alert Support	Multi-Language	Meeting Space/Room Display	NFC, Beacon, and Facial Recognition	Jackpot and Table Limit Signs	Video Wall	Concierge	Media Player Agnostic

## Info-Tech Recommends:

With the ability to be compatible with numerous player platforms and scalable deployment options, DISE is recommended for casinos and hotels looking for a solution to a very specific and narrow use case that can be deployed quickly and effectively. With significant focus on system integration, DISE Professional can be integrated with other systems to offer operators a functional solution capable of significantly enhancing the guest experience.

# Appspace, originally focused on internal communications, has now expanded into external digital communication

## Emerging Player

Product: Appspace Core 5.11  
Employees: 51-200  
Headquarters: Dallas, TX  
Website: [appspace.com](http://appspace.com)  
Founded: 2002  
Presence: Privately Held

# appspace

**The vendor declined to provide pricing, and publicly available pricing could not be found**

## Overview

Appspace entered the digital communication market in 2002, focusing primarily on internal workforce communication. Appspace has now expanded beyond internal communications to retail, education, etc. content management and digital signage.

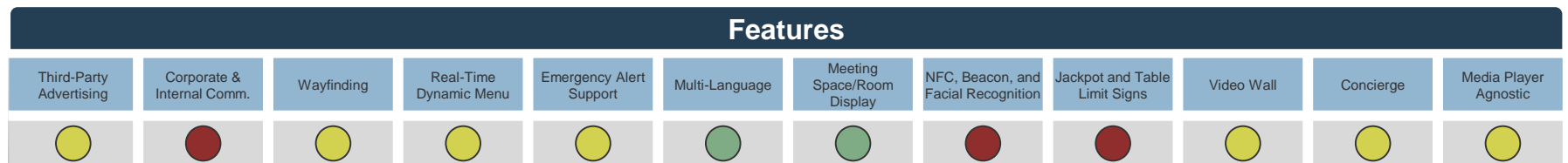
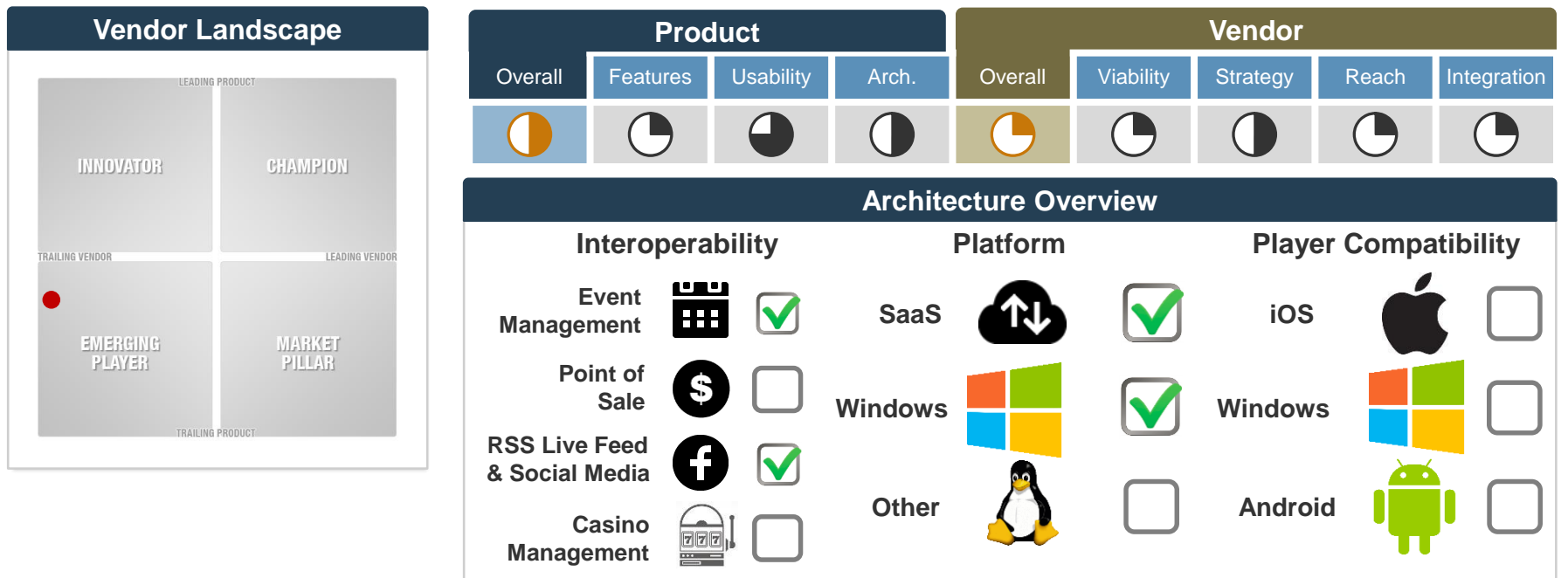
## Strengths

- Appspace Core 5.11 is a scalable solution that can be deployed as a cloud-based, on-premises, or hybrid solution.
- The Appspace application allows customers to manage and preview content on a mobile phone and directly upload content to a player.
- Appspace Core 5.11 is available in multiple languages through various language packs.
- Through a partnership with Cisco, the Appspace solution is compatible with Cisco's Edge 340 Digital Media Player and Appspace software licenses are available on the Cisco global price list.

## Challenges

- To be fully functional, Appspace Core 5.11 add-ons must be purchased as individual features. These include an Alerts and Meeting Room add-on that is capable of displaying emergency messages and room management displays respectively.
- Appspace does not provide phone support; rather support is primarily online through a ticket submission system.

# Appspace Core 5.11 supports a variety of deployment models including cloud, on-premises, and hybrid solutions



## Info-Tech Recommends:

Info-Tech recommends that casinos and hotels looking for specific digital signage features, such as emergency messaging or room display capabilities, or that have standardized on Cisco network devices consider Appspace Core 5.11. Appspace is making strides in the visual communication space beyond internal communications and we expect it to continue to make significant, solution-functionality strides.

# Identify leading candidates with the *Digital Signage Vendor Shortlist Tool*

The Info-Tech [Digital Signage Vendor Shortlist Tool](#) is designed to generate a customized shortlist of vendors based on *your* key priorities.

## This tool offers the ability to modify:

Overall Vendor vs. Product Weightings

- Individual product criteria weightings:

- ✓ Features
- ✓ Usability
- ✓ Affordability
- ✓ Architecture

- Individual vendor criteria weightings:

- ✓ Viability
- ✓ Strategy
- ✓ Reach
- ✓ Channel

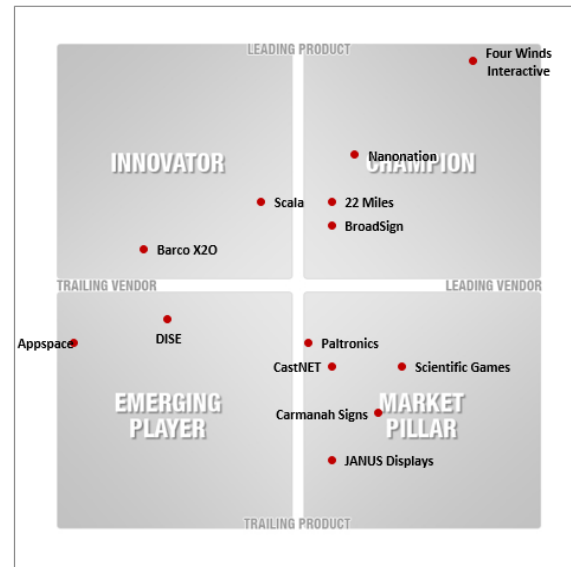


INFO-TECH  
RESEARCH GROUP

## Custom Vendor Landscape™ and Vendor Shortlist

Your customized Vendor Shortlist is sorted based on the priorities identified on the Data Entry tab. Scores are calculated using the Client Weightings and the assigned Info-Tech Vendor Landscape scores. Vendors are ranked based on the computed Average Score. The Average Score is the average of the weighted average Vendor Score and the weighted average Product Score. A custom Vendor Landscape™ has been generated as well, plotting the weighted average Vendor Score against the weighted average Product Score.

### Custom Vendor Landscape™ for [Enterprise Name Here]



# Appendix

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1. Vendor Landscape Methodology: Overview
2. Vendor Landscape Methodology: Product Selection & Information Gathering
3. Vendor Landscape Methodology: Scoring
4. Vendor Landscape Methodology: Information Presentation
5. Vendor Landscape Methodology: Fact Check & Publication
6. Product Pricing Scenario

# Vendor Landscape Methodology: Overview

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Info-Tech's Vendor Landscapes are research materials that review a particular IT market space, evaluating the strengths and abilities of both the products available in that space, as well as the vendors of those products. These materials are created by a team of dedicated analysts operating under the direction of a senior subject matter expert over a period of six weeks.

Evaluations weigh selected vendors and their products (collectively "solutions") on the following eight criteria to determine overall standing:

- **Features:** The presence of advanced and market-differentiating capabilities.
- **Usability:** The intuitiveness, power, and integrated nature of administrative consoles and client software components.
- **Affordability:** The three-year total cost of ownership of the solution.
- **Architecture:** The degree of integration with the vendor's other tools, flexibility of deployment, and breadth of platform applicability.
- **Viability:** The stability of the company as measured by its history in the market, the size of its client base, and its financial performance.
- **Strategy:** The commitment to both the market-space, as well as to the various sized clients (small, mid-sized, and enterprise clients).
- **Reach:** The ability of the vendor to support its products on a global scale.
- **Channel:** The measure of the size of the vendor's channel partner program, as well as any channel strengthening strategies.

Evaluated solutions are plotted on a standard two-by-two matrix:

- **Champions:** Both the product and the vendor receive scores that are above the average score for the evaluated group.
- **Innovators:** The product receives a score that is above the average score for the evaluated group, but the vendor receives a score that is below the average score for the evaluated group.
- **Market Pillars:** The product receives a score that is below the average score for the evaluated group, but the vendor receives a score that is above the average score for the evaluated group.
- **Emerging Players:** Both the product and the vendor receive scores that are below the average score for the evaluated group.

Info-Tech's Vendor Landscapes are researched and produced according to a strictly adhered to process that includes the following steps:

- Vendor/product selection
- Information gathering
- Vendor/product scoring
- Information presentation
- Fact checking
- Publication

This document outlines how each of these steps is conducted.

# Vendor Landscape Methodology: Vendor/Product Selection & Information Gathering

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Info-Tech works closely with its client base to solicit guidance in terms of understanding the vendors with whom clients wish to work and the products that they wish evaluated; this demand pool forms the basis of the vendor selection process for Vendor Landscapes. Balancing this demand, Info-Tech also relies upon the deep subject matter expertise and market awareness of its Senior, Lead, and Principal Research Analysts to ensure that appropriate solutions are included in the evaluation. As an aspect of that expertise and awareness, Info-Tech's analysts may, at their discretion, determine the specific capabilities that are required of the products under evaluation, and include in the Vendor Landscape only those solutions that meet all specified requirements.

Information on vendors and products is gathered in a number of ways via a number of channels.

Initially, a request package is submitted to vendors to solicit information on a broad range of topics. The request package includes:

- A detailed survey.
- A pricing scenario (see Vendor Landscape Methodology: Price Evaluation and Pricing Scenario, below).
- A request for reference clients.
- A request for a briefing and, where applicable, guided product demonstration.

These request packages are distributed approximately twelve weeks prior to the initiation of the actual research project to allow vendors ample time to consolidate the required information and schedule appropriate resources.

During the course of the research project, briefings and demonstrations are scheduled (generally for one hour each session, though more time is scheduled as required) to allow the analyst team to discuss the information provided in the survey, validate vendor claims, and gain direct exposure to the evaluated products. Additionally, an end-user survey is circulated to Info-Tech's client base and vendor-supplied reference accounts are interviewed to solicit their feedback on their experiences with the evaluated solutions and with the vendors of those solutions.

These materials are supplemented by a thorough review of all product briefs, technical manuals, and publicly available marketing materials about the product, as well as about the vendor itself.

Refusal by a vendor to supply completed surveys or submit to participation in briefings and demonstrations does not eliminate a vendor from inclusion in the evaluation. Where analyst and client input has determined that a vendor belongs in a particular evaluation, it will be evaluated as best as possible based on publicly available materials only. As these materials are not as comprehensive as a survey, briefing, and demonstration, the possibility exists that the evaluation may not be as thorough or accurate. Since Info-Tech includes vendors regardless of vendor participation, it is always in the vendor's best interest to participate fully.

All information is recorded and catalogued, as required, to facilitate scoring and for future reference.



# Vendor Landscape Methodology: Scoring

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Once all information has been gathered and evaluated for all vendors and products, the analyst team moves to scoring. All scoring is performed at the same time so as to ensure as much consistency as possible. Each criterion is scored on a ten point scale, though the manner of scoring for criteria differs slightly:

- Features is scored via **Cumulative Scoring**
- Affordability is scored via **Scalar Scoring**
- All other criteria are scored via **Base5 Scoring**

In Cumulative Scoring, a single point is assigned to each evaluated feature that is regarded as being fully present, partial points to each feature that is partially present, and zero points to features that are deemed to be absent or unsatisfactory. The assigned points are summed and normalized to a value out of ten. For example, if a particular Vendor Landscape evaluates eight specific features in the Feature Criteria, the summed score out of eight for each evaluated product would be multiplied by 1.25 to yield a value out of ten.

In Scalar Scoring, a score of ten is assigned to the lowest cost solution, and a score of one is assigned to the highest cost solution. All other solutions are assigned a mathematically determined score based on their proximity to / distance from these two endpoints. For example, in an evaluation of three solutions, where the middle cost solution is closer to the low end of the pricing scale it will receive a higher score, and where it is closer to the high end of the pricing scale it will receive a lower score; depending on proximity to the high or low price it is entirely possible that it could receive either ten points (if it is very close to the lowest price) or one point (if it is very close to the highest price). Where pricing cannot be determined (vendor does not supply price and public sources do not exist), a score of 0 is automatically assigned.

In Base5 scoring a number of sub-criteria are specified for each criterion (for example, Longevity, Market Presence, and Financials are sub-criteria of the Viability criterion), and each one is scored on the following scale:

- 5 - The product/vendor is exemplary in this area (nothing could be done to improve the status).
- 4 - The product/vendor is good in this area (small changes could be made that would move things to the next level).
- 3 - The product/vendor is adequate in this area (small changes would make it good, more significant changes required to be exemplary).
- 2 - The product/vendor is poor in this area (this is a notable weakness and significant work is required).
- 1 - The product/vendor is terrible/fails in this area (this is a glaring oversight and a serious impediment to adoption).

The assigned points are summed and normalized to a value out of ten as explained in Cumulative Scoring above.

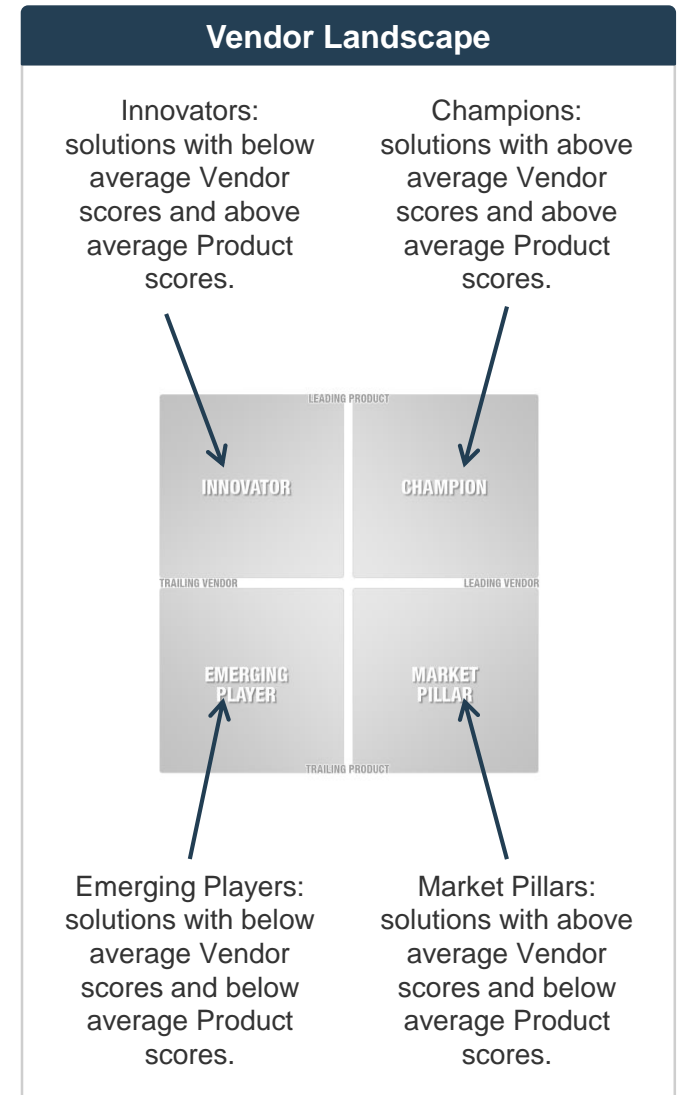
Scores out of ten, known as Raw scores, are transposed as-is into Info-Tech's Vendor Landscape Shortlist Tool, which automatically determines Vendor Landscape positioning (see Vendor Landscape Methodology: Information Presentation - Vendor Landscape, below), Criteria Score (see Vendor Landscape Methodology: Information Presentation - Criteria Score, below), and Value Index (see Vendor Landscape Methodology: Information Presentation - Value Index, below).

# Vendor Landscape Methodology: Information Presentation – Vendor Landscape

Info-Tech's Vendor Landscape is a two-by-two matrix that plots solutions based on the combination of Product score and Vendor score. Placement is not determined by absolute score, but instead by relative score. Relative scores are used to ensure a consistent view of information and to minimize dispersion in nascent markets, while enhancing dispersion in commodity markets to allow for quick visual analysis by clients.

Relative scores are calculated as follows:

1. Raw scores are transposed into the Info-Tech Vendor Landscape Shortlist Tool (for information on how Raw scores are determined, see Vendor Landscape Methodology: Scoring, above).
2. Each individual criterion Raw score is multiplied by the pre-assigned weighting factor for the Vendor Landscape in question. Weighting factors are determined prior to the evaluation process to eliminate any possibility of bias. Weighting factors are expressed as a percentage such that the sum of the weighting factors for the Vendor criteria (Viability, Strategy, Reach, Channel) is 100% and the sum of the Product criteria (Features, Usability, Affordability, Architecture) is 100%.
3. A sum-product of the weighted Vendor criteria scores and of the weighted Product criteria scores is calculated to yield an overall Vendor score and an overall Product score.
4. Overall Vendor scores are then normalized to a 20 point scale by calculating the arithmetic mean and standard deviation of the pool of Vendor scores. Vendors for whom their overall Vendor score is higher than the arithmetic mean will receive a normalized Vendor score of 11-20 (exact value determined by how much higher than the arithmetic mean their overall Vendor score is), while vendors for whom their overall Vendor score is lower than the arithmetic mean will receive a normalized Vendor score of between one and ten (exact value determined by how much lower than the arithmetic mean their overall Vendor score is).
5. Overall Product score is normalized to a 20 point scale according to the same process.
6. Normalized scores are plotted on the matrix, with Vendor score being used as the x-axis, and Product score being used as the y-axis.

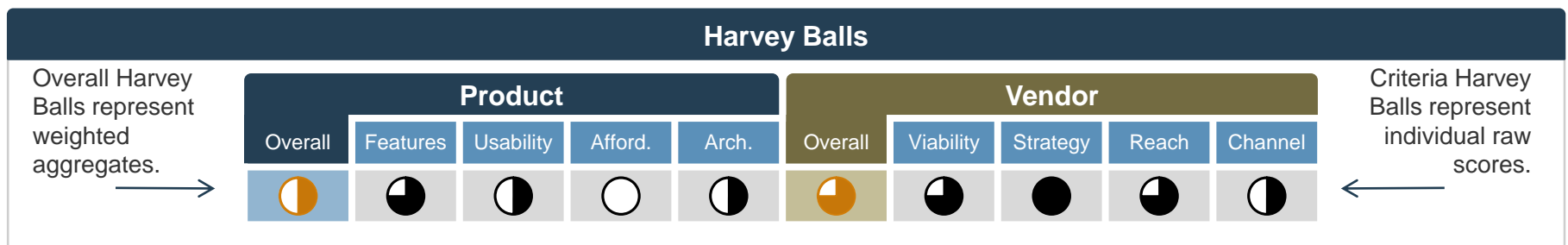


# Vendor Landscape Methodology: Information Presentation – Criteria Scores (Harvey Balls)

Info-Tech’s criteria scores are visual representations of the absolute score assigned to each individual criterion, as well as of the calculated overall vendor and product scores. The visual representation used is Harvey Balls.

Harvey Balls are calculated as follows:

1. Raw scores are transposed into the Info-Tech Vendor Landscape Shortlist Tool (for information on how raw scores are determined, see Vendor Landscape Methodology: Scoring, above).
2. Each individual criterion raw score is multiplied by a pre-assigned weighting factor for the Vendor Landscape in question. Weighting factors are determined prior to the evaluation process, based on the expertise of the Senior or Lead Research Analyst, to eliminate any possibility of bias. Weighting factors are expressed as a percentage, such that the sum of the weighting factors for the vendor criteria (Viability, Strategy, Reach, Channel) is 100%, and the sum of the product criteria (Features, Usability, Affordability, Architecture) is 100%.
3. A sum-product of the weighted vendor criteria scores and of the weighted product criteria scores is calculated to yield an overall vendor score and an overall product score.
4. Both overall vendor score / overall product score, as well as individual criterion raw scores are converted from a scale of one to ten to Harvey Ball scores on a scale of zero to four, where exceptional performance results in a score of four and poor performance results in a score of zero.
5. Harvey Ball scores are converted to Harvey Balls as follows:
  - A score of four becomes a full Harvey Ball.
  - A score of three becomes a three-quarter full Harvey Ball.
  - A score of two becomes a half-full Harvey Ball.
  - A score of one becomes a one-quarter full Harvey Ball.
  - A score of zero becomes an empty Harvey Ball.
6. Harvey Balls are plotted by solution in a chart where rows represent individual solutions and columns represent overall vendor / overall product, as well as individual criteria. Solutions are ordered in the chart alphabetically by vendor name.



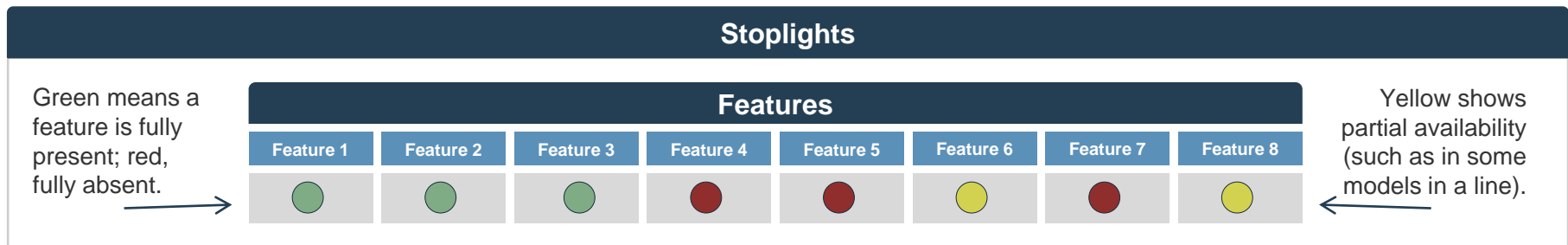
# Vendor Landscape Methodology: Information Presentation – Feature Ranks (Stoplights)

Info-Tech's Feature Ranks are visual representations of the presence/availability of individual features that collectively comprise the Features' criteria. The visual representation used is stoplights.

Stoplights are determined as follows:

1. A single point is assigned to each evaluated feature that is regarded as being fully present, partial points to each feature that is partially present, and zero points to features that are deemed to be fully absent or unsatisfactory.
  - Fully present means all aspects and capabilities of the feature as described are in evidence.
  - Fully absent means all aspects and capabilities of the feature as described are missing or lacking.
  - Partially present means some, but not all, aspects and capabilities of the feature as described are in evidence, **OR** all aspects and capabilities of the feature as described are in evidence, but only for some models in a line.
2. Feature scores are converted to stoplights as follows:
  - Full points become a green light.
  - Partial points become a yellow light.
  - Zero points become a red light.
3. Stoplights are plotted by solution in a chart where rows represent individual solutions and columns represent individual features. Solutions are ordered in the chart alphabetically by vendor name.

For example, a set of applications is being reviewed and a feature of “*Integration with Mobile Devices*” that is defined as “*availability of dedicated mobile device applications for iOS, Android, and BlackBerry devices*” is specified. Solution A provides such apps for all listed platforms and scores “green,” solution B provides apps for iOS and Android only and scores “yellow,” while solution C provides mobile device functionality through browser extensions, has no dedicated apps, and so scores “red.”



# Vendor Landscape Methodology: Information Presentation – Price Evaluation

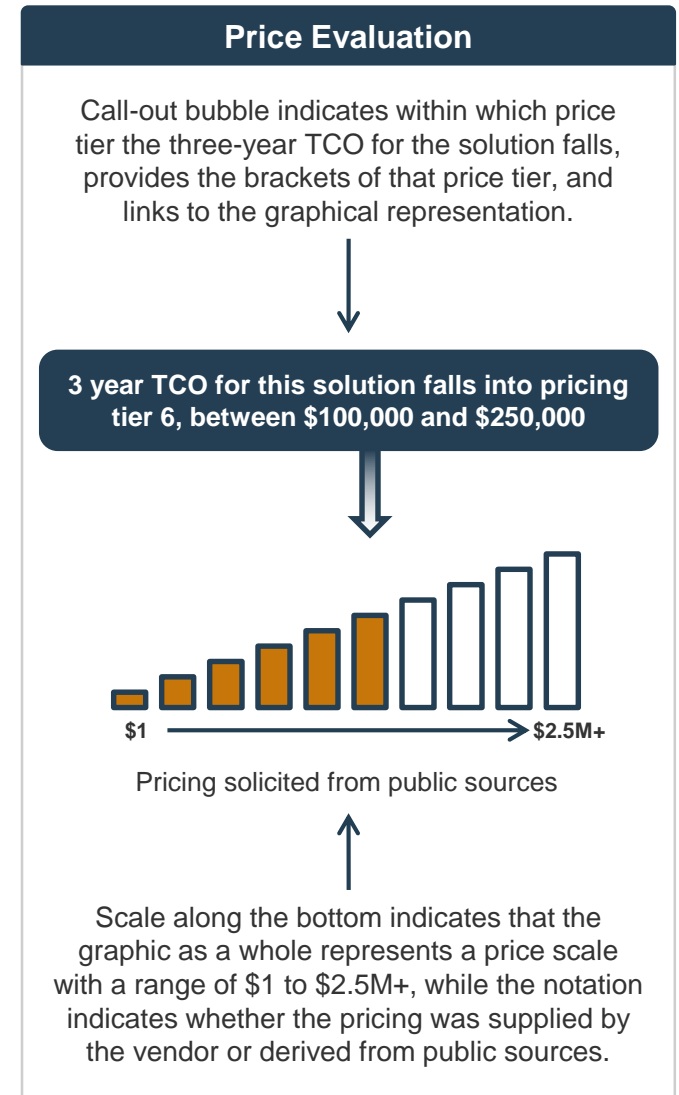
Info-Tech's Price Evaluation is a tiered representation of the three-year Total Cost of Ownership (TCO) of a proposed solution. Info-Tech uses this method of communicating pricing information to provide high-level budgetary guidance to its end-user clients while respecting the privacy of the vendors with whom it works. The solution TCO is calculated and then represented as belonging to one of ten pricing tiers.

Pricing tiers are as follows:

1. Between \$1 and \$2,500
2. Between \$2,500 and \$10,000
3. Between \$10,000 and \$25,000
4. Between \$25,000 and \$50,000
5. Between \$50,000 and \$100,000
6. Between \$100,000 and \$250,000
7. Between \$250,000 and \$500,000
8. Between \$500,000 and \$1,000,000
9. Between \$1,000,000 and \$2,500,000
10. Greater than \$2,500,000

Where pricing is not provided, Info-Tech makes use of publicly available sources of information to determine a price. As these sources are not official price lists, the possibility exists that they may be inaccurate or outdated, and so the source of the pricing information is provided. Since Info-Tech publishes pricing information regardless of vendor participation, it is always in the vendor's best interest to supply accurate and up to date information.

Info-Tech's Price Evaluations are based on pre-defined pricing scenarios (see Product Pricing Scenario, below) to ensure a comparison that is as close as possible between evaluated solutions. Pricing scenarios describe a sample business and solicit guidance as to the appropriate product/service mix required to deliver the specified functionality, the list price for those tools/services, as well as three full years of maintenance and support.



# Vendor Landscape Methodology: Information Presentation – Scenarios

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Info-Tech's Scenarios highlight specific use cases for the evaluated solution to provide as complete (when taken in conjunction with the individual written review, Vendor Landscape, Criteria Scores, Feature Ranks, and Value Index) a basis for comparison by end-user clients as possible.

Scenarios are designed to reflect tiered capability in a particular set of circumstances. Determination of the Scenarios in question is at the discretion of the analyst team assigned to the research project. Where possible, Scenarios are designed to be mutually exclusive and collectively exhaustive, or at the very least, hierarchical such that the tiers within the Scenario represent a progressively greater or broader capability.

Scenario ranking is determined as follows:

1. The analyst team determines an appropriate use case.  
*For example:*
  - Clients that have multinational presence and require vendors to provide four-hour onsite support.
2. The analyst team establishes the various tiers of capability.  
*For example:*
  - Presence in Americas
  - Presence in EMEA
  - Presence in APAC
3. The analyst team reviews all evaluated solutions and determines which ones meet which tiers of capability.  
*For example:*
  - Presence in Americas – Vendor A, Vendor C, Vendor E
  - Presence in EMEA – Vendor A, Vendor B, Vendor C
  - Presence in APAC – Vendor B, Vendor D, Vendor E
4. Solutions are plotted on a grid alphabetically by vendor by tier. Where one vendor is deemed to be stronger in a tier than other vendors in the same tier, they may be plotted non-alphabetically.  
*For example:*
  - Vendor C is able to provide four-hour onsite support to 12 countries in EMEA while Vendors A and B are only able to provide four-hour onsite support to eight countries in EMEA; Vendor C would be plotted first, followed by Vendor A, then Vendor B.

Analysts may also elect to list only the most Exemplary Performers for a given use case. One to three vendors will appear for each of these purchasing scenarios with a brief explanation as to why we selected them as top-of-class.

# Vendor Landscape Methodology: Information Presentation – Vendor Awards

At the conclusion of all analyses, Info-Tech presents awards to exceptional solutions in three distinct categories. Award presentation is discretionary; not all awards are extended subsequent to each Vendor Landscape and it is entirely possible, though unlikely, that no awards may be presented.

Awards categories are as follows:

- **Champion Awards** are presented to those solutions, and only those solutions, that land in the Champion zone of the Info-Tech Vendor Landscape (see Vendor Landscape Methodology: Information Presentation - Vendor Landscape, above). If no solutions land in the Champion zone, no Champion Awards are presented. Similarly, if multiple solutions land in the Champion zone, multiple Champion Awards are presented.
- **Trend Setter Awards** are presented to those solutions, and only those solutions, that are deemed to include the most original/inventive product/service, or the most original/inventive feature/capability of a product/service. If no solution is deemed to be markedly or sufficiently original/inventive, either as a product/service on the whole or by feature/capability specifically, no Trend Setter Award is presented. Only one Trend Setter Award is available for each Vendor Landscape.
- **Best Overall Value Awards** are presented to those solutions, and only those solutions, that are ranked highest on the Info-Tech Value Index (see Vendor Landscape Methodology: Information Presentation – Value Index, above). If insufficient pricing information is made available for the evaluated solutions, such that a Value Index cannot be calculated, no Best Overall Value Award will be presented. Only one Best Overall Value Award is available for each Vendor Landscape.

## Vendor Awards



Info-Tech's **Champion Award** is presented to solutions in the Champion zone of the Vendor Landscape.



Info-Tech's **Trend Setter Award** is presented to the most original/inventive solution evaluated.



Info-Tech's **Best Overall Value Award** is presented to the solution with the highest Value Index score.

# Vendor Landscape Methodology: Fact Check & Publication

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Info-Tech takes the factual accuracy of its Vendor Landscapes, and indeed of all of its published content, very seriously. To ensure the utmost accuracy in its Vendor Landscapes, we invite all vendors of evaluated solutions (whether the vendor elected to provide a survey and/or participate in a briefing or not) to participate in a process of fact check.

Once the research project is complete and the materials are deemed to be in a publication ready state, excerpts of the material specific to each vendor's solution are provided to the vendor. Info-Tech only provides material specific to the individual vendor's solution for review encompassing the following:

- All written review materials of the vendor and the vendor's product that comprise the evaluated solution.
- Info-Tech's Criteria Scores / Harvey Balls detailing the individual and overall vendor / product scores assigned.
- Info-Tech's Feature Rank / stoplights detailing the individual feature scores of the evaluated product.
- Info-Tech's Raw Pricing for the vendor either as received from the vendor or as collected from publicly available sources.
- Info-Tech's Scenario ranking for all considered scenarios for the evaluated solution.

Info-Tech does not provide the following:

- Info-Tech's Vendor Landscape placement of the evaluated solution.
- Info-Tech's Value Score for the evaluated solution.
- End-user feedback gathered during the research project.
- Info-Tech's overall recommendation in regard to the evaluated solution.

Info-Tech provides a one-week window for each vendor to provide written feedback. Feedback must be corroborated (be provided with supporting evidence), and where it does, feedback that addresses factual errors or omissions is adopted fully, while feedback that addresses opinions is taken under consideration. The assigned analyst team makes all appropriate edits and supplies an edited copy of the materials to the vendor within one week for final review.

Should a vendor still have concerns or objections at that time, they are invited to a conversation, initially via email, but as required and deemed appropriate by Info-Tech, subsequently via telephone, to ensure common understanding of the concerns. Where concerns relate to ongoing factual errors or omissions, they are corrected under the supervision of Info-Tech's Vendor Relations personnel. Where concerns relate to ongoing differences of opinion, they are again taken under consideration with neither explicit nor implicit indication of adoption.

Publication of materials is scheduled to occur within the six weeks immediately following the completion of the research project, but does not occur until the fact check process has come to conclusion, and under no circumstances are "pre-publication" copies of any materials made available to any client.



# Product Pricing Scenario

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An organization is looking to implement your digital signage software solution from greenfield. The organization has the following:

- One hotel location with 350 rooms
- A lobby with two entrances
- Twelve meeting rooms
- One cafe

**The expected solution capabilities are as follows:**

- Twelve meeting room signs with integration with Delphi Event Management.
- Two concierge signs at the lobby displaying weather, hotel events, and interactive-touch wayfinding to key property points of interest.
- Two menu boards at the café with integration with the POS system for menu items and costs with three times of day product highlights.
- Support services should include the following:
  - Creative design
  - Implementation support and training
  - Technical documentation and guides
  - 24/7 technical support by phone or online
  - 24/7 monitoring and alerting
  - First-year maintenance fees
  - Second-year maintenance fees
  - Third-year maintenance fees